```
Set     Items   Description
S1    1713502   IC=A61?
S2      58525   VACUUM? ? OR EVACU? OR VACUA? OR NEGATIV?()PRESSUR? OR
AS-
             PIRAT?  OR (AIR OR RESPIR?()(GAS OR GASES OR GASSES) OR
AIRFL-
             OW)(5N)(WITHDRAW? OR EVACUAT? OR REMOV? OR PUMP???(3N)OUT
OR -
             SUCTION OR SUCK???)
S3     112573   CHEST OR THORACIC  OR THORAX OR  INTRATHORA?  OR
EXTRATHOR-
             AC?  OR EXTRATHORAX?  OR BRONCH? OR PLEURA? OR LUNG? ? OR
PUL-
             M? OR  INTRAPLEURA? OR INTRATHORA? OR  PNEUMOTHORA? OR
PNEUMO-
             ()THORA? OR  PNEUMON? OR RESPIR? OR PLEURODES? OR AIRWAY?
?
S4       1355   S2(10N)S3
S5     198443   HEART OR HEARTS OR CARDIO? OR CARDIA?  OR PULSE OR
HEARTRA-
             TE? ? OR HEARBEAT? OR ATRI?? OR VENTRIC? OR CORONARY OR
BLOOD-
             ()(CIRCULATION OR PRESSURE) OR CIRCULATORY OR VASCULA? OR
MYO-
             CARD?
S6        149   S4(20N)S5

? show files


File 347:JAPIO Dec 1976-2009/Oct(Updated 100129)
         (c) 2010 JPO & JAPIO
File 350:Derwent WPIX 1963-2010/UD=201014
         (c) 2010 Thomson Reuters
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6/5/4 (Item 4 from file: 347)
DIALOG(R)File 347: JAPIO
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07751419 **Image available**
AUTOMATIC RESUSCITATOR

Pub. No.: 2003-245324 [JP 2003245324 A]
Published: September 02, 2003 (20030902)
Inventor: ASHIMURA HIDEAKI
Applicant: ASHIMURA HIDEAKI
Application No.: 2002-046347 [JP 200246347]
Filed: February 22, 2002 (20020222)
International Class: A61H-031/00; A62B-009/00

ABSTRACT

PROBLEM TO BE SOLVED: To solve the problems of a conventional resuscitator, including the limitation of a place where cardiopulmonary resuscitation is performed, difficulty in mounting and operating the conventional one on a basket type stretcher for a single person or in a narrow place due to the large size of a resuscitator body and accessories attributed to the need for a backplate and an oxygen cylinder for drive necessary for compression of the thorax, and the danger of occluding the respiratory tract due to difficulty in treating a wearer when the wearer vomits due to the limitation of his/her postures.

SOLUTION: This resuscitator effectively performs resuscitation by the synergy effect of a **negative pressure** effect in the **thoracic** cavity by the tightening of a fixing belt 2 and a direct compression effect of the **heart** by a compression pad 7 without limiting the place of mounting and wearer's postures by using a compact resuscitator body 1 and the fixing belt 2.

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Dialog eLink: Order File History
6/5/5 (Item 5 from file: 347)
DIALOG(R)File 347: JAPIO
(c) 2010 JPO & JAPIO. All rights reserved.

06077695 **Image available**
ARTIFICIAL HEART-LUNG MACHINE

Pub. No.: 11-019207 [JP 11019207 A]
Published: January 26, 1999 (19990126)
Inventor: NOMURA KAZUHISA
Applicant: AMANO SHIGEHISA
S N SEIKI KK
Application No.: 09-182088 [JP 97182088]
Filed: July 08, 1997 (19970708)
International Class: A61M-001/00; A61M-001/10; A61M-001/14; A61M-001/16

ABSTRACT

PROBLEM TO BE SOLVED: To improve the safety of an artificial **heart- lung** machine of **negative- pressure** suction type which recovers the blood in respective reservoirs by setting the pressure to the negative and sucking the blood.

SOLUTION: The inside of main reservoirs 2, 4 and four sub-reservoirs SRa- SRd are

adjusted to the negative pressure by a controller 6 so that the blood is sucked into respective reservoirs via a blood drawing line 11 and a sub-suction line 19. The blood sucked in the sub-reservoirs SRa-SRd is led into the main reservoir 2 and returned to a patient via a pump 3 provided in the blood feed line 12, an artificial lung 4, and an arterial filter 5. Leak solenoid valves are provided in respective control parts C1-C5 of the controller 6 and, when the negative pressure is abnormally raised, the reservoir is automatically opened to the atmosphere. As a result, its safety is further enhanced. When the blood in the reservoir is quickly drawn, this device can be responded to it by opening the leak solenoids to improve usability.

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Dialog eLink: Order File History
6/5/6 (Item 6 from file: 347)
DIALOG(R)File 347: JAPIO
(c) 2010 JPO & JAPIO. All rights reserved.

04411009 **Image available**

RESPIRATION VIBRATION GENERATING DEVICE FOR ARTIFICIAL RESPIRATORY APPARATUS

Pub. No.: 06-054909 [JP 6054909 A]
Published: March 01, 1994 (19940301)
Inventor: KIKUCHI FUJIKO
NITSUTA KAZUTOSHI
Applicant: SUZUKI MOTOR CORP [000208] (A Japanese Company or Corporation), JP (Japan)
METORAN KK [000000] (A Japanese Company or Corporation), JP (Japan)
Application No.: 04-235227 [JP 92235227]
Filed: August 11, 1992 (19920811)
International Class: [5] A61M-016/00; A61H-031/00
JAPIO Class: 28.2 (SANITATION -- Medical)
JAPIO Keyword: R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessers)
Journal: Section: C, Section No. 1207, Vol. 18, No. 288, Pg. 8, June 02, 1994 (19940602)

ABSTRACT

PURPOSE: To reduce the flow loss and pressure loss and generate highly efficient **pulse** waves by arranging valve element sections interrupting or communicating a passage between a pressurizing port and a **respiratory** port and a passage between a **negative-pressure** port and the **respiratory** port when a rotary valve is rotated to the preset position on the rotary valve.

CONSTITUTION: A rotary valve 51 is constituted of a pair of valve element sections 53, 54 extended from the center section of the axial direction of a rotary shaft 44 to one side of the axial direction and a pair of valve element sections extended in the other side of the axial direction, and the valve element sections 53, 54 are formed into a circular arc-shaped cross section notched with the upper and lower portions of a cylinder coaxial with the rotary shaft 44 into a rectangular shape. The valve element sections 55, 56 are formed into a circular arc-shaped cross section notched with the right side and left side portions of a cylinder coaxial with the rotary shaft 44, and the valve element sections 53, 54 and the valve element sections 55, 56 are set to positions staggered with the phase relation by 90 deg.. The output direction and input direction of the rotary valve 51 can be arranged in the same direction, the passage can be formed into nearly a straight shape, and the passage loss can be reduced.

Dialog eLink: Order File History
6/5/7 (Item 7 from file: 347)
DIALOG(R)File 347: JAPIO
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03832165 **Image available**

GAS SUPPLYING DEVICE FOR ARTIFICIAL LUNG

Pub. No.: 04-197265 [JP 4197265 A]
Published: July 16, 1992 (19920716)
Inventor: SHIMOMURA YASUSHI
YAMAGUCHI MASAHIKO
FUNAKUBO AKIO
Applicant: UBE IND LTD [000020] (A Japanese Company or Corporation), JP (Japan)
Application No.: 02-327482 [JP 90327482]
Filed: November 28, 1990 (19901128)
International Class: [5] A61M-001/14
JAPIO Class: 28.2 (SANITATION -- Medical)
JAPIO Keyword: R086 (MEDICAL TREATMENT -- Artificial Internal Organs); R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessers)
Journal: Section: C, Section No. 1000, Vol. 16, No. 524, Pg. 61, October 28, 1992 (19921028)

ABSTRACT

PURPOSE: To eliminate the possibility that air bubbles introduce to a blood side and to execute safe exocirculation of blood by continuously measuring the blood pressure and gaseous pressure in the artificial lung under exocirculation and controlling these pressures in such a manner that the gaseous pressure is supplied at a level lower than the level of the blood pressure.

CONSTITUTION: Pressure sensors 13, 14 are installed to the inlet side and outlet side of

the artificial lung 12 and pressure sensors 15, 16 are installed to the inlet side and outlet side of the gas flow passage of the artificial lung 12. The values thereof are taken into the microcomputer in the gas supplying device 10. The blood pressures in the inlet side and outlet side of the artificial lung 12 are kept measured at all times by the sensors 13, 14. The pressure acting on the porous membrane in the artificial lung 12 is detected and a valve 1 7 is operated in accordance with this pressure so that the gas is supplied to the artificial lung 12 under the pressure lower than the blood pressure. On the other hand, a discharge line is closed by a selector valve 20 and the gas in the artificial lung 12 is sucked by the suction pump provided in the gas supplying pipe 10, by which the gaseous pressure in the artificial **lung** 12 is set under the **negative pressure** lower than the **blood pressure** in the artificial **lung** 12 when the **blood pressure** in the artificial **lung** 12 attains a **negative pressure**.

6/5/39 (Item 32 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0017415400 *Drawing available*
WPI Acc no: 2008-C35843/200817
Related WPI Acc No: 2005-252159; 2005-664084; 2007-688943
XRPX Acc No: N2008-188943
Patient treating method for manipulating intrathoracic pressure, involves providing ventilation source to supply gases to patient, and providing inspiration, where vacuum source is utilized to extract gases from airway of patient
Patient Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N)
Inventor: BIONDI J W; LURIE K G; MENK V; ZIELINSKI T M

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20080047555	A1	20080228	US 2003660366	A	20030911	200817	B
			US 2005127993	A	20050511		
			US 2007862099	A	20070926		

Priority Applications (no., kind, date): US 2003660366 A 20030911; US 2005127993 A 20050511; US 2007862099 A 20070926

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20080047555	A1	EN	10	5	Continuation of application	US 2003660366
					C-I-P of application	US 2005127993
					Continuation of patent	US 6938618
					C-I-P of patent	US 7275542

Alerting Abstract US A1
NOVELTY - The method involves compressing a chest of a patient. A physiological condition of the patient is measured, and a manner of performing chest compressions is altered based on the measured condition to maximize cardiac and cerebral blood flow. A ventilation source is provided to supply respiratory gases to a patient. An artificial inspiration is provided, and a vacuum source e.g. bag-valve system, is utilized to actively extract respiratory gases from an airway of the patient. An expiratory port is provided near mouth or nose to permit rapid exit of carbon-dioxide from lungs.
DESCRIPTION - An INDEPENDENT CLAIM is also included for a system for treating a patient.
USE - Method for treating a patient for manipulating intrathoracic pressures to facilitate blood flow to heart and brain in states of low blood pressure.
ADVANTAGE - The artificial inspiration is provided, and the **vacuum** source is utilized to actively extract **respiratory** gases from an **airway** of the patient, thus creating an **intrathoracic vacuum** to enhance venous return to **heart**, and hence avoiding brain injury or death.
DESCRIPTION OF DRAWINGS - The drawing shows a schematic view of a bag-valve resuscitation system.
60 Bag-valve resuscitator
62 Bag
64 Main ventilation chamber
66 Ventilation port
68, 80, 92, 98 Fish mouth valves
70 Ventilation tube
72 Patient support
76, 84 One way valves
78 Venturi tube
82 Expiratory chamber
88 Negative chamber
96 Exhaust tube

Title Terms /Index Terms/Additional Words: PATIENT; TREAT; METHOD; MANIPULATE; PRESSURE ; VENTILATION; SOURCE; SUPPLY; GAS; INSPIRATION; VACUUM; UTILISE; EXTRACT; AIRWAY

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0016/00	A	I	F	B	20060101
A61M-0016/00	C	I	F	B	20060101

ECLA: A61M-016/00M9, A61M-016/04, A61M-016/20B
ICO: K61M-016:00A14, K61M-016:00A6, K61M-016:00M1S, K61M-016:04A7, K61M-016:06, K61M-202:02A, K61M-205:58B, K61M-205:58L, K61M-230:20D, K61M-230:30, K61M-230:43C
US Classification, Current Main: 128-205240; Secondary: 128-203110, 128-204230, 128-204280
US Classification, Issued: 128205.24, 128203.11, 128204.23, 128204.28
File Segment: EngPI; ;
DWPI Class: P34

Dialog eLink: Order File History
6/5/63 (Item 56 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0016006566 *Drawing available*
WPI Acc no: 2006-538195/200655
Related WPI Acc No: 2006-204001
XRPX Acc No: N2006-431281
Therapeutic gas generation apparatus e.g. for treatment of acute pulmonary vasoconstriction, has gas bottle fixed to inlet of receptacle, so that nitrogen dioxide gas passes through surface active material in receptacle
Patent Assignee: CYTERRA CORP (CYTE-N); GENO LLC (GENO-N)
Inventor: FINE D H; ROUNBEHLER D R

Patent Family (2 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20060180147	A1	20060817	US 2004602333	P	20040818	200655	B
			US 2005659094	P	20050308		
			US 2005206305	A	20050818		
			US 2006276610	A	20060307		
US 7618594	B2	20091117	US 2004602333	P	20040818	200976	E
			US 2005659094	P	20050308		
			US 2005206305	A	20050818		
			US 2006276610	A	20060307		

Priority Applications (no., kind, date): US 2004602333 P 20040818; US 2005659094 P 20050308; US 2005206305 A 20050818; US 2006276610 A 20060307

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20060180147	A1	EN	25	15	Related to Provisional	US 2004602333
					Related to Provisional	US 2005659094
					C-I-P of application	US 2005206305
US 7618594	B2	EN			Related to Provisional	US 2004602333
					Related to Provisional	US 2005659094
					C-I-P of application	US 2005206305
					C-I-P of patent	US 7560076

Alerting Abstract US A1
NOVELTY - A gas permeation cell (235) containing nitrogen dioxide gas, is attached to an inlet of a receptacle in a cartridge (240). A surface active material in the receptacle is coated with an aqueous solution of antioxidant such as ascorbic acid, alpha tocopherol, gamma tocopherol. The inlet is configured to receive flow from the cell to an outlet through the surface active material so that the nitrogen dioxide is converted into nitric oxide at ambient temperature.
USE - For generating nitric oxide used for treatment of acute pulmonary vasoconstriction, traumatic injury, fat embolism in lung, acidosis, inflammation of lung, adult respiratory distress syndrome, acute **pulmonary** edema, post **cardiac** surgery acute **pulmonary** hypertension, perinatal **aspiration** syndrome, haline membrane disease, acute **pulmonary** thromboembolism, sepsis, asthma, status asthmaticus chronic pulmonary hypertension, bronchopulmonary dysplasia and chronic pulmonary thromboembolism.
ADVANTAGE - The nitrogen dioxide is converted efficiently into nitric oxide at

ambient temperature, by the surface active material in the cartridge. The weight and cost of the cartridge are reduced and the versatility of the cartridge is improved.
DESCRIPTION OF DRAWINGS - The figure shows the block diagrams of nitrogen oxide delivery system.
200 nitrogen oxide generation system
205 air pump
210 regulator
235 gas permeation cell
240 cartridge

Title Terms /Index Terms/Additional Words: THERAPEUTIC; GAS; GENERATE; APPARATUS; TREAT ; ACUTE; PULMONARY; VASOCONSTRICTING; BOTTLE; FIX; INLET; RECEPTACLE; SO; NITROGEN; PASS; THROUGH; SURFACE; ACTIVE; MATERIAL

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0015/00	A	I	F	B	20060101
A61M-0016/00	A	I	L	B	20060101
A62B-0007/08	A	I	F	B	20060101
A61M-0015/00	C	I	F	B	20060101
A61M-0016/00	C	I		B	20060101
A62B-0007/00	C	I		B	20060101

ECLA: A61M-016/10, C01B-021/24
ICO: K61M-202:02M1
US Classification, Current Main: 128-203120
US Classification, Issued: 128203.12
File Segment: EngPI; ;
DWPI Class: P34

Dialog eLink: Order File History
6/5/68 (Item 61 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0015639823 *Drawing available*

WPI Acc no: 2006-204001/200621
Related WPI Acc No: 2006-538195
XRAM Acc no: C2006-067476
XRPX Acc No: N2006-175618

Apparatus for converting nitrogen dioxide to nitric oxide useful as therapeutic gas for decreasing pulmonary hypertension comprises receptacle to receive gas and directs the gas to outlet via surface-active material coated with antioxidant

Patent Assignee: CYTERRA CORP (CYTE-N); FINE D H (FINE-I); ROUNBEHLER D R (ROUN-I); GENO LLC (GENO-N)
Inventor: FINE D H; ROUNBEHLER D R; FINE D; ROUNBEHLER D

Patent Family (8 patents, 110 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2006023616	A2	20060302	WO 2005US29344	A	20050818	200621	B
US 20060048779	A1	20060309	US 2004602333	P	20040818	200621	E
			US 2005206305	A	20050818		
EP 1789119	A2	20070530	EP 2005804105	A	20050818	200735	E
			WO 2005US29344	A	20050818		
AU 2005277397	A1	20060302	AU 2005277397	A	20050818	200759	E
JP 2008510675	W	20080410	WO 2005US29344	A	20050818	200827	E
			JP 2007527997	A	20050818		
WO 2006023616	A3	20080904				200859	E
US 7560076	B2	20090714	US 2004602333	P	20040818	200946	E
			US 2005206305	A	20050818		
US 20090285731	A1	20091119	US 2004602333	P	20040818	200977	E
			US 2005206305	A	20050818		
			US 2009500929	A	20090710		

Priority Applications (no., kind, date): US 2004602333 P 20040818; US 2005206305 A 20050818; US 2009500929 A 20090710

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 2006023616	A2	EN	37	14		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
US 20060048779	A1	EN			Related to Provisional	US 2004602333
EP 1789119	A2	EN			PCT Application	WO 2005US29344
					Based on OPI patent	WO 2006023616
Regional Designated States,Original	AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU					
AU 2005277397	A1	EN			Based on OPI patent	WO 2006023616
JP 2008510675	W	JA	21		PCT Application	WO 2005US29344
					Based on OPI patent	WO 2006023616
WO 2006023616	A3	EN				
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
US 7560076	B2	EN			Related to Provisional	US 2004602333
US 20090285731	A1	EN			Related to Provisional	US 2004602333
					Continuation of application	US 2005206305
					Continuation of patent	US 7560076

Alerting Abstract WO A2

NOVELTY - An apparatus for converting nitrogen dioxide to nitric oxide (A1) comprises a receptacle (R1) including an inlet, an outlet, and a surface-active material coated with an aqueous solution of an antioxidant. The inlet is configured to receive a gas flow and fluidly communicate the gas flow to the outlet through the surface-active material such that nitrogen dioxide in the gas flow is converted to nitric oxide.
DESCRIPTION - An INDEPENDENT CLAIM is also included for an apparatus (A2) for generating a therapeutic gas including nitric oxide and comprises:

1. A permeation cell having liquid nitrogen dioxide and capable of diffusing gaseous nitrogen dioxide into an air flow; and
2. The receptacle (R1) having an inlet, an outlet, and a surface-active material coated with an aqueous solution of antioxidant. The inlet is configured to receive the air flow from the permeation cell and fluidly communicates the air flow to the outlet through the surface-active material to convert the gaseous nitrogen dioxide to nitric oxide at ambient temperature.

ACTIVITY - Hypotensive; Respiratory-Gen.;Thrombolytic; Antiinflammatory; Immunosuppressive; Vasotropic; Antiasthmatic.
MECHANISM OF ACTION - None given.
USE - For converting nitrogen dioxide to nitric oxide useful as therapeutic gas in mammals (claimed). Useful for decreasing **pulmonary** hypertension, acute **pulmonary** vasoconstriction, traumatic injury, **aspiration** or inhalation injury, fat embolism in the **lung**, acidosis, inflammation of the lung, adult respiratory distress syndrome, acute **pulmonary** edema, acute mountain sickness, post-**cardiac** surgery, perinatal **aspiration** syndrome, haline membrane disease, acute **pulmonary** thromboembolism, heparin-protamine reactions, sepsis, asthma, hypoxia, bronchopulmonary dysplasia.
ADVANTAGE - The system employs surface-active material coated with antioxidant as a simple and effective mechanism for converting nitrogen dioxide to nitric oxide. The delivery system uses portable air pump for delivery of nitric oxide and eliminates the need of pressurized gas bottle of nitric oxide gas, making the system simple as compared to conventional apparatus.
DESCRIPTION OF DRAWINGS - The figure shows an exemplary NO delivery system using the cartridge.

Title Terms /Index Terms/Additional Words: APPARATUS; CONVERT; NITROGEN; NITRIC; OXIDE; USEFUL; THERAPEUTIC; GAS; DECREASE; PULMONARY; HYPERTENSIVE; COMPRISE; RECEPTACLE; RECEIVE; DIRECT; OUTLET; SURFACE; ACTIVE; MATERIAL; COATING; ANTIOXIDANT

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61K-0033/00	A	I	L	B	20060101
A61M-0015/00	A	I	F	B	20060101
A61M-0016/00	A	I	L	B	20060101
A61P-0011/00	A	I	L	B	20060101
A61P-0011/06	A	I	L	B	20060101
A61P-0011/08	A	I	L	B	20060101
A61P-0009/12	A	I	L	B	20060101
A62B-0007/08	A	I	L	B	20060101
A62B-0007/08	A	I	F	B	20060101
B01D-0053/06	A	I	L	B	20060101
C01B-0021/22	A	I	L	B	20060101
C01B-0021/24	A	I	F	B	20060101
B01J-0008/02	A	I	F	B	20060101
A61K-0033/00	C	I	L	B	20060101
A61M-0015/00	C	I	L	B	20060101
A61M-0015/00	C	I	F	B	20060101
A61P-0011/00	C	I	L	B	20060101
A61P-0009/00	C	I	L	B	20060101
A62B-0007/00	C	I	L	B	20060101
B01D-0053/06	C	I	L	B	20060101
C01B-0021/00	C	I	L	B	20060101
C01B-0021/00	C	I	F	B	20060101
A61M-0016/00	C	I	L	B	20090101
A62B-0007/00	C	I	F	B	20090101
B01J-0008/02	C	I		B	20060101

ECLA: A61M-016/10, C01B-021/24
ICO: K61M-015:00, K61M-202:02M1
US Classification, Current Main: 128-203120, 422-120000; Secondary: 95-102000, 95-105000, 95-120000, 96-153000, 96-154000, 128-200140, 128-203120, 422-122000, 423-402000
US Classification, Issued: 128203.12, 423402, 422212, 422120, 422122, 95102, 95105, 95120, 128200.14, 128203.12, 96154, 96153

Japan National Classification FI Terms			
FI Term	**Facet**	**Rank**	**Type**
A61K-033/00			
A61P-011/00			
A61P-011/06			
A61P-011/08			
A61P-009/12			
C01B-021/24 A			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C086		
4C201		
4G043		
4C086	HA07	
4C086	NA06	
4C086	ZA59	

File Segment: CPI; EngPI
DWPI Class: B06; E13; E36; J01; P34
Manual Codes (CPI/A-N): B03-F; B03-H; B05-C03; B11-C03; B11-C04; B11-C05; B12-M01B; B12-M01E; B14-C03; B14-F02D; B14-F04; B14-K01; B14-S06; B14-S08; E11-D; E31-H04; J01-E03E

Dialog eLink: Order File History
6/5/77 (Item 70 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0015313877 *Drawing available*
WPI Acc no: 2005-664084/200568
Related WPI Acc No: 2005-252159; 2007-688943; 2008-C35843
XRPX Acc No: N2005-544018
Bag-valve resuscitation for treatment of e.g. hypertension, head trauma involves repeated delivery of positive pressure breath and extraction of respiratory gases
Patent Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N)

Inventor: BIONDI J W; LURIE K G; MENK V; ZIELINSKI T M; LURIE K; ZIELINSKI T

Patent Family (2 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20050217677	A1	20051006	US 2003660366	A	20030911	200568	B
			US 2005127993	A	20050511		
US 7275542	B2	20071002	US 2003660366	A	20030911	200765	E
			US 2005127993	A	20050511		

Priority Applications (no., kind, date): US 2003660366 A 20030911; US 2005127993 A 20050511

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20050217677	A1	EN	11	5	Continuation of application	US 2003660366
US 7275542	B2	EN			Continuation of application	US 2003660366
					Continuation of patent	US 6938618

Alerting Abstract US A1
NOVELTY - The patient's chest is repetitively compressed and decompressed. A positive pressure breath is delivered to the person and respiratory gases are extracted from the person's **airway** to create an **intrathoracic vacuum** that enhances blood flow to the **heart**. Delivery of the positive pressure breath and extraction of respiratory gases are repeated.
DESCRIPTION - The intrathoracic vacuum lowers the person's intrathoracic pressure to -1 to -20 millimeter mercury. A pressure source and a vacuum source, which comprise a compressible bag system are interfaced to deliver positive pressure breath and to extract the respiratory gases.
USE - For treatment of hypertension, head trauma and cardiac arrest.
ADVANTAGE - Increases circulation to increase blood pressure for people with low blood pressure. Improves blood circulation to help maintain vital organ functions until resuscitation for people in cardiac arrest.
DESCRIPTION OF DRAWINGS - The figure is a schematic diagram of a bag-valve resuscitation system.
62 Bag
64 Ventilation chamber
80 Fish mouth valve
86 Tube
88 Negative chamber

Title Terms /Index Terms/Additional Words: BAG; VALVE; RESUSCITATION;

TREAT; HYPERTENSIVE; HEAD; TRAUMA; REPEAT; DELIVER; POSITIVE; PRESSURE; BREATH; EXTRACT; RESPIRATION; GAS

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0016/00	A	I		R	20060101
A61M-0016/00	A	I	F	B	20060101
A61M-0016/00	C	I		R	20060101
A61M-0016/00	C	I	F	B	20060101

ECLA: A61M-016/00M9
ICO: K61M-016:00M1S
US Classification, Current Main: 128-205240; Secondary: 128-202290, 128-203110, 128-204230, 128-204280
US Classification, Issued: 128202.29, 128203.11, 128205.24, 128205.24, 128203.11, 128204.23, 128204.28
File Segment: EngPI; ;
DWPI Class: P34; P35

Dialog eLink: Order File History
6/5/80 (Item 73 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0015267714 *Drawing available*
WPI Acc no: 2005-617813/200563
Related WPI Acc No: 1995-193914; 1996-433571; 2000-421466; 2002-139260; 2002-641994; 2002-681034; 2003-030322; 2003-310772; 2003-371349; 2003-766762; 2004-709334; 2004-747424; 2004-756946; 2004-756947; 2004-776032; 2005-541393; 2008-K89814
XRAM Acc no: C2005-185660
XRPX Acc No: N2005-507186
Treatment of person suffering from diabetes comprises interfacing valve system to person's airway, and permitting person to inhale and exhale through valve system
Patent Assignee: CPRX LLC (CPRX-N); ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N)
Inventor: LURIE K G

Patent Family (2 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20050199237	A1	20050915	US 1993149204	A	19931109	200563	B
			US 1995403009	A	19950310		
			US 1997950702	A	19971015		
			US 2000546252	A	20000410		
			US 2001854238	A	20010511		
			US 2002119203	A	20020408		
			US 2002224263	A	20020819		
			US 2003401493	A	20030328		
US 7204251	B2	20070417	US 1993149204	A	19931109	200728	E
			US 1995403009	A	19950310		
			US 1997950702	A	19971015		
			US 2000546252	A	20000410		
			US 2001854238	A	20010511		
			US 2002119203	A	20020408		
			US 2002224263	A	20020819		
			US 2003401493	A	20030328		

Priority Applications (no., kind, date): US 1993149204 A 19931109; US 1995403009 A 19950310; US 1997950702 A 19971015; US 2000546252 A 20000410; US 2001854238 A 20010511; US 2002119203 A 20020408; US 2002224263 A 20020819; US 2003401493 A 20030328

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20050199237	A1	EN	56	54	C-I-P of application	US 1993149204
					C-I-P of application	US 1995403009
					Continuation of application	US 1997950702
					C-I-P of application	US 2000546252
					C-I-P of application	US 2001854238
					C-I-P of application	US 2002119203
					C-I-P of application	US 2002224263
					C-I-P of patent	US 5551420
					C-I-P of patent	US 5692498
					Continuation of patent	US 6062219
					C-I-P of patent	US 6526973
					C-I-P of patent	US 6604523
US 7204251	B2	EN			C-I-P of application	US 1993149204
					C-I-P of application	US 1995403009
					Continuation of application	US 1997950702
					C-I-P of application	US 2000546252
					C-I-P of application	US 2001854238
					C-I-P of application	US 2002119203
					C-I-P of application	US 2002224263
					C-I-P of patent	US 5551420
					C-I-P of patent	US 5692498
					Continuation of patent	US 6062219
					C-I-P of patent	US 6526973
					C-I-P of patent	US 6604523
					C-I-P of patent	US 6986349

Alerting Abstract US A1
NOVELTY - A person suffering from diabetes is treated by interfacing a valve system to person's airway, the valve system configured to decrease or prevent respiratory gas flow to person's lungs during portion of inhalation event; and permitting the person to inhale and exhale through the valve system.
DESCRIPTION - The treatment of person suffering from diabetes where vital organ perfusion is diminished involves interfacing valve system to the person's airway, the valve system being configured to decrease or prevent respiratory gas flow to the person's lungs during portion of inhalation event; and permitting the person to inhale and exhale

through the valve system, in which during inhalation the valve system functions to produce a **vacuum** within the **thorax** to increase blood flow back to the right **heart** of the person, thereby enhancing vital organ perfusion and function in order to treat the person suffering from diabetes.

An INDEPENDENT CLAIM is also included for a device for facilitating the treatment of a person suffering from diabetes, comprising housing having an opening adapted to be interfaced with the person's airway; and valve system operable to regulate respiratory gas flow through the housing and into the person's lungs due to inhalation, the valve system assisting in manipulating intrathoracic pressures to increase blood flow back to the person's chest and hereby enhance vital organ perfusion and function. The valve system is configured to permit respiratory gases to flow to the person's lungs when the negative intrathoracic pressure reaches a pressure of -3--10 cm H_20 to treat the person suffering from diabetes.

USE - Used in the treatment of person suffering from diabetes in which vital organ perfusion is diminished.

ADVANTAGE - The invention provides increased blood circulation. Supplemental oxygen is supplied through the valve and into the respiratory circuit, which provides for more efficient supply of oxygen into the blood stream.

DESCRIPTION OF DRAWINGS - The figure is a schematic view illustrating airflow through a ventilation circuit.

20 Ventilation circuit
22 Expiration valve
24 Inflow valve
26 Ventilation valve
28 Ventilation bag

Title Terms /Index Terms/Additional Words: TREAT; PERSON; SUFFER; DIABETES; COMPRISE; INTERFACE; VALVE; SYSTEM; AIRWAY; PERMIT; INHALE; EXHALATION; THROUGH

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-016/00			Main		"Version 7"
A61H-0031/00	A	I	F	B	20060101
A61M-0016/04	A	I	L	B	20060101
A61H-0031/00	C	I		B	20060101
A61M-0016/04	C	I		B	20060101

ECLA: A61H-031/00, A61M-016/00, A61M-016/04, A61M-016/20, A61M-016/20B
ICO: K61M-016:00A11, K61M-016:00M1S, K61M-016:00M9, K61M-016:20A2, K61M-016:20B
US Classification, Current Main: 128-205240; Secondary: 128-204180, 128-204230

US Classification, Issued: 128204.18, 128204.23, 128205.24, 128205.24, 128204.18
File Segment: CPI; EngPI
DWPI Class: B07; D22; P34; P33
Manual Codes (CPI/A-N): B11-C04; B12-K04A; D09-C01

Dialog eLink: Order File History
6/5/82 (Item 75 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0015191800 *Drawing available*
WPI Acc no: 2005-541393/200555
Related WPI Acc No: 1995-193914; 1996-433571; 2000-421466; 2002-139260; 2002-641994; 2002-681034; 2003-030322; 2003-310772; 2003-371349; 2003-766762; 2004-709334; 2004-747424; 2004-756946; 2004-756947; 2004-776032; 2005-617813; 2008-K89814
XRPX Acc No: N2005-443494

Treating method for e.g. traumatic head injury in patient, involves extracting respiratory gases from person`s airway using vacuum to create intrathoracic vacuum for lowering pressures in thorax

Patent Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N)
Inventor: LURIE K G

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050165334	A1	20050728	US 2003426161	A	20030428	200555	B
			US 2003460558	A	20030611		
			US 2003660462	A	20030911		
			US 2004796875	A	20040308		
			US 200534996	A	20050112		

Priority Applications (no., kind, date): US 2003426161 A 20030428; US 2003460558 A 20030611; US 2003660462 A 20030911; US 2004796875 A 20040308; US 200534996 A 20050112

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20050165334	A1	EN	28	15	C-I-P of application	US 2003426161
					C-I-P of application	US 2003460558
					C-I-P of application	US 2003660462
					C-I-P of application	US 2004796875

Alerting Abstract US A1
NOVELTY - The method involves repetitively compressing a person`s chest. **Respiratory** gases are extracted from a person`s **airway** using a **vacuum** to create an **intrathoracic vacuum** for lowering pressures in the **thorax**. Pressures are lowered in the thorax to enhance blood flow back to a **heart** and to lower intracranial pressures. A positive pressure breath is periodically delivered to the person to provide ventilation.
DESCRIPTION - An INDEPENDENT CLAIM is also included for a device for lowering a patient`s intrathoracic pressure.
USE - Used for treating e.g. a traumatic head injury, blood loss and illness, in a patient.
ADVANTAGE - The method maintains adequate blood pressure and ventilation to a patient, and maintains vital organ perfusion and oxygenation.
DESCRIPTION OF DRAWINGS - The drawing shows a schematic diagram of a system for reducing intracranial and intraocular pressures.
100 Facial mask
200 Valve system
300 Treatment system
310 Controller
330 Heart rate sensor

Title Terms /Index Terms/Additional Words: TREAT; METHOD; TRAUMA; HEAD; INJURY; PATIENT ; EXTRACT; RESPIRATION; GAS; PERSON; AIRWAY; VACUUM; LOWER; PRESSURE; THORAX

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61H-031/00			Main		"Version 7"

ECLA: A61M-016/06, A61M-016/20
ICO: K61M-016:08D2, K61M-230:06, K61M-230:20D, K61M-230:43C, K61M-230:50
US Classification, Current Main: 601-044000
US Classification, Issued: 60144
File Segment: EngPI; EPI;
DWPI Class: S05; P33
Manual Codes (EPI/S-X): S05-A05A

Dialog eLink: Order File History
6/5/85 (Item 78 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0015075086 *Drawing available*
WPI Acc no: 2005-424525/200543
Related WPI Acc No: 2004-339043; 2008-F34179
XRAM Acc no: C2005-130271
XRPX Acc No: N2005-344555
System for diagnosing cardiovascular-related condition, e.g. coronary artery disease, in breathing person, comprises valve system capable of being coupled to person's airway and configured to decrease respiratory gas flow
Patent Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N)
Inventor: LURIE K G

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050126567	A1	20050616	US 2002251080	A	20020920	200543	B
			US 200551345	A	20050204		
US 7311668	B2	20071225	US 200551345	A	20050204	200803	E

Priority Applications (no., kind, date): US 2002251080 A 20020920; US 200551345 A 20050204

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20050126567	A1	EN	11	6	Continuation of application	US 2002251080
					Continuation of patent	US 6863656

Alerting Abstract US A1
NOVELTY - A diagnosing system for diagnosing a cardiovascular-related condition in a breathing person, comprises valve system (200) capable of being coupled to the person's airway and configured to decrease or prevent respiratory gas flow to the person's lungs during at least a portion of an inhalation event to produce a **vacuum** within the **thorax** to increase blood flow back to right **heart** of person; and monitoring system.
DESCRIPTION - A diagnosing system for diagnosing a cardiovascular-related condition

in a breathing person, comprises valve system capable of being coupled to the person's airway and configured to decrease or prevent respiratory gas flow to the person's lungs during at least a portion of an inhalation event to produce a **vacuum** within the **thorax** to increase blood flow back to right **heart** of person, thus increasing **blood circulation** and **blood pressure**, where the valve system is configurable to vary the level of inspiratory impedance; and monitoring system to monitor changes in physiological parameter(s) while the person inhales and exhales through the valve system.
USE - For diagnosing a cardiovascular-related condition (e.g. coronary artery disease, high blood pressure, pulmonary hypertension, cardiac function, severity in peripheral vascular disease, integrity of autonomic nervous system reflexes, or intracardiac shunting of blood) in a breathing person (claimed).
ADVANTAGE - The system permits a person's cardiovascular system to be stressed, without having the person physically exercise.
DESCRIPTION OF DRAWINGS - The figure is a cross sectional side view of the valve system.
200 Valve system
202 Housing
204 Socket
206 Ball
208 Ventilation tube

Title Terms /Index Terms/Additional Words: SYSTEM; DIAGNOSE; CARDIOVASCULAR; RELATED; CONDITION; CORONARY; ARTERY; DISEASE; BREATH; PERSON; COMPRISE; VALVE; CAPABLE; COUPLE; AIRWAY; CONFIGURATION; DECREASE; RESPIRATION; GAS; FLOW

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61B-0005/00	A	I	F	B	20060101
A61B-0005/02	A	I	L	B	20060101
A61B-0005/0205	A	I		R	20060101
A61B-0005/097	A	I		R	20060101
A61B-0005/00	C	I	F	B	20060101
A61B-0005/02	C	I	L	B	20060101
A61B-0005/0205	C	I		R	20060101
A61B-0005/08	C	I		R	20060101

ECLA: A61B-005/0205, A61B-005/097
US Classification, Current Main: 128-203110; Secondary: 128-205240
US Classification, Issued: 128205.24, 128203.11, 600481, 600484, 600485, 600500, 600529

File Segment: CPI; EngPI; EPI
DWPI Class: B04; S05; P34; Q39; P31
Manual Codes (EPI/S-X): S05-D01C1
Manual Codes (CPI/A-N): B04-P01; B11-C08E2; B12-K04A2

Dialog eLink: Order File History
6/5/88 (Item 81 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0014904381 *Drawing available*
WPI Acc no: 2005-252159/200526
Related WPI Acc No: 2005-664084; 2007-688943; 2008-C35843
XRPX Acc No: N2005-207578
Intrathoracic pressure manipulating method for treating e.g. cardiac arrest, involves extracting respiratory gases from person`s airway following positive pressure breath to create vacuum to enhance venous return to heart
Patent Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N); BIONDI J W (BION-I)
Inventor: BIONDI J W; LURIE K G; MENK V; ZIELINSKI T; ZIELINSKI T M

Patent Family (3 patents, 106 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050056277	A1	20050317	US 2003660366	A	20030911	200526	B
WO 2005035065	A1	20050421	WO 2004US27772	A	20040825	200532	E
US 6938618	B2	20050906	US 2003660366	A	20030911	200558	E

Priority Applications (no., kind, date): US 2003660366 A 20030911

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
US 20050056277	A1	EN	11	5	
WO 2005035065	A1	EN			
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				

Alerting Abstract US A1
NOVELTY - The method involves repeatedly compressing chest of a person. Respiratory gases are impeded from flowing to person`s lungs between chest compressions. A positive pressure breath is delivered to the person. The respiratory gases are actively extracted from an airway of the person following the positive pressure breath to create an **intrathoracic vacuum** for enhancing venous return to **heart**.
DESCRIPTION - An INDEPENDENT CLAIM is also included for a device for manipulating intrathoracic pressures.
USE - Used for manipulating intrathoracic pressure for treating a person suffering from cardiac arrest, low blood pressure and head trauma (claimed).
ADVANTAGE - The method extracts the **respiratory** gases to create the **intrathoracic vacuum** for enhancing venous return to the **heart**, so that returned blood can be re-oxygenated and circulated back through the person`s body, thus decreasing brain pressures and secondary brain injury.
DESCRIPTION OF DRAWINGS - The drawing shows a flow chart illustrating a method of enhancing venous return to a heart.

Title Terms /Index Terms/Additional Words: PRESSURE; MANIPULATE; METHOD; TREAT; CARDIAC ; ARREST; EXTRACT; RESPIRATION; GAS; PERSON; AIRWAY; FOLLOW; POSITIVE; BREATH; VACUUM; ENHANCE; VEIN; RETURN; HEART

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0016/00	A	I		R	20060101
A61M-0016/00	C	I		R	20060101

ECLA: A61M-016/00M9
ICO: K61M-016:00M1S
US Classification, Current Main: 128-200240; Secondary: 128-204180, 128-205240
US Classification, Issued: 128205.24, 128204.18, 128200.24, 128203.11, 128204.23, 128204.28, 128205.13 , 128205.24
File Segment: EngPI; EPI;
DWPI Class: S05; P34; P35; Q66
Manual Codes (EPI/S-X): S05-A05A; S05-G02B2B

Dialog eLink: Order File History
6/5/89 (Item 82 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0014594067 *Drawing available*
WPI Acc no: 2004-776032/200476
Related WPI Acc No: 1995-193914; 1996-433571; 2000-421466; 2002-139260; 2002-641994; 2002-681034; 2003-030322; 2003-310772; 2003-371349; 2003-766762; 2004-709334; 2004-747424; 2004-756946; 2004-756947; 2005-541393; 2005-617813; 2008-K89814
XRPX Acc No: N2004-611317
Head trauma and low blood circulation treatment method for patient, involves extracting respiratory gas to create intrathoracic vacuum for lowering pressure and enhancing backflow of blood to heart after delivering positive pressure breath
Patent Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N)
Inventor: LURIE K; LURIE K G; MCKNITE S

Patent Family (5 patents, 107 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 2004096109	A2	20041111	WO 2004US12294	A	20040420	200476	B
US 20040231664	A1	20041125	US 2003426161	A	20030428	200478	E
			US 2003460558	A	20030611		
			US 2003660462	A	20030911		
			US 2004796875	A	20040308		
EP 1617798	A2	20060125	EP 2004760311	A	20040420	200608	E
			WO 2004US12294	A	20040420		
JP 2006524543	W	20061102	JP 2006513187	A	20040420	200672	E
			WO 2004US12294	A	20040420		
CN 1829548	A	20060906	CN 200480017342	A	20040420	200706	E

Priority Applications (no., kind, date): US 2003426161 A 20030428; US 2003460558 A 20030611; US 2003660462 A 20030911; US 2004765318 A 20040126; US 2004796875 A 20040308

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 2004096109	A2	EN	45	15		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
US 20040231664	A1	EN			C-I-P of application	US 2003426161
					C-I-P of application	US 2003460558
					C-I-P of application	US 2003660462
EP 1617798	A2	EN			PCT Application	WO 2004US12294
					Based on OPI patent	WO 2004096109
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR					
JP 2006524543	W	JA	26		PCT Application	WO 2004US12294
					Based on OPI patent	WO 2004096109

Alerting Abstract WO A2
NOVELTY - The method involves delivering positive pressure breath to a person. **Respiratory** gas is extracted from the person via **vacuum** in order to create **intrathoracic vacuum** for lowering pressure and enhancing backflow of blood to **heart**. DESCRIPTION - A vacuum regulator (540), which regulates amount of vacuum supplied to a patient, has a housing (570) that receives gas through primary and secondary flow paths. A one-way check valve (578) blocks the primary flowpath, while a diaphragm (584) blocks the secondary flow path. INDEPENDENT CLAIMS are also included for the following:

A. an intrathoracic pressure lowering device;
B. an intracranial pressure lowering device; and
C. an intracranial pressure lowering method.

USE - For treating head trauma and low blood circulation of patient.
ADVANTAGE - Increases heart function efficiency. Improves blood flow to heart and brain of patient with low blood circulation. Increases cardiac output and systemic vital

organ perfusion.
DESCRIPTION OF DRAWINGS - The figure shows the end view of a vacuum regulator.
540 Vacuum regulator
570 Housing
578 One-way check valve
582 Spring
584 Diaphragm

Title Terms /Index Terms/Additional Words: HEAD; TRAUMA; LOW; BLOOD; CIRCULATE; TREAT; METHOD; PATIENT; EXTRACT; RESPIRATION; GAS; VACUUM; LOWER; PRESSURE; ENHANCE; BACKFLOW; HEART; AFTER; DELIVER; POSITIVE; BREATH

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61H-0031/02	A	I	L	B	20060101
A61M-0016/00	A	I	F	B	20060101
A61M-0016/06	A	I		R	20060101
A61M-0016/08	A	N		R	20060101
A61M-0016/20	A	I	L	B	20060101
A61M-0016/20	A	I		R	20060101
A62B-0007/00	A	I	L	B	20060101
A62B-0007/04	A	I	L	B	20060101
A61H-0031/00	C	I	L	B	20060101
A61M-0016/00	C	I	F	B	20060101
A61M-0016/00	C	I	L	B	20060101
A61M-0016/06	C	I		R	20060101
A61M-0016/08	C	N		R	20060101
A61M-0016/20	C	I	L	B	20060101
A61M-0016/20	C	I		R	20060101
A62B-0007/00	C	I	L	B	20060101

ECLA: A61M-016/06, A61M-016/20
ICO: K61M-016:08D2, K61M-016:08D4, K61M-230:06, K61M-230:20D, K61M-230:43C, K61M-230:50
US Classification, Current Main: 128-200110
US Classification, Issued: 128200.11

Japan National Classification FI Terms			
FI Term	**Facet**	**Rank**	**Type**
A61M-016/00 343		A	main
A61H-031/02		B	secondary
A61M-016/00 355 Z		B	secondary
A61M-016/20 F		B	secondary
A61H-031/02			
A61M-016/00 343			
A61M-016/00 355 Z			
A61M-016/20 F			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C074		
4C103		
4C074	AA10	
4C074	BB03	

File Segment: EngPI; EPI;
DWPI Class: S05; P33; P34; P35

Dialog eLink: Order File History
6/5/90 (Item 83 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0014565464 *Drawing available*
WPI Acc no: 2004-747422/200473
Related WPI Acc No: 2003-555214; 2004-747052; 2005-020408; 2005-141760; 2009-M74775

Intra-bronchial valve device for air passageway of lung, has flexible membrane arranged on a frame, and covers portions of frame supports and sealed to frame to prevent airflow between sides of flexible membrane

Patent Assignee: ALFERNESS C A (ALFE-I); DILLARD D H (DILL-I); GONZALEZ H X (GONZ-I)
Inventor: ALFERNESS C A; DILLARD D H; GONZALEZ H X

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20040211412	A1	20041028	US 2001951105	A	20010911	200473	B
			US 2004847427	A	20040517		

Priority Applications (no., kind, date): US 2001951105 A 20010911; US 2004847427 A 20040517

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20040211412	A1	EN	13	20	Division of application	US 2001951105

Alerting Abstract US A1
NOVELTY - A flexible membrane, arranged on a frame, covers portions of frame supports (88,90,92) and sealed to the frame to prevent airflow between the sides of the flexible membrane. The frame supports are joined to one another at different attachment points.
USE - For air passageway of lung. For reducing lung size. For treating chronic obstructive pulmonary disease.
ADVANTAGE - Prevents respiratory damage. Improves efficiency of respiratory musculature and right **ventricular** fitting. Collapses portion of **lung**. Simplifies administering of evaluation therapy. Allows **removal** of obstruction device from **air** passageway.
DESCRIPTION OF DRAWINGS - The figure shows the isometric view of an air passageway obstruction device.
80 Air passageway obstruction device
88,90,92 Frame supports
106,108,110 Anchors

Title Terms /Index Terms/Additional Words: INTRA; BRONCHIAL; VALVE; DEVICE; AIR; PASSAGE; LUNG; FLEXIBLE; MEMBRANE; ARRANGE; FRAME; COVER; PORTION; SUPPORT; SEAL; PREVENT; AIRFLOW; SIDE

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61B-0017/00	A	I	F	R	20060101
A61B-0017/12	A	I		R	20060101
A61B-0017/24	A	I	L	R	20060101
A61D-0001/12	A	I		R	20060101
A61F-0011/00	A	I		R	20060101
A61M-0015/00	A	I		R	20060101
A61M-0016/00	A	I		R	20060101
A61M-0016/04	A	N		R	20060101
A61B	S	I		R	20060101
A61B-0017/00	C	I	F	R	20060101
A61B-0017/12	C	I		R	20060101
A61B-0017/24	C	I	L	R	20060101
A61D-0001/00	C	I		R	20060101
A61F-0011/00	C	I		R	20060101
A61M-0015/00	C	I		R	20060101
A61M-0016/00	C	I		R	20060101
A61M-0016/04	C	N		R	20060101

ECLA: A61B-017/12P
ICO: K61B-017:12P2, K61M-016:04A1
US Classification, Current Main: 128-200240
US Classification, Issued: 128200.24
File Segment: EngPI; ;
DWPI Class: P34

Dialog eLink: Order File History
6/5/91 (Item 84 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0014366007 *Drawing available*
WPI Acc no: 2004-554756/200454

XRPX Acc No: N2004-438816

Patient lung reduction method, e.g. for treating pulmonary emphysema, whereby a bronchial catheter is inserted into an over-swollen lung area and the supplying bronchopulmonary closed in synchronism with patient breathing

Patent Assignee: FREITAG L (FREI-I); PULMONX (PULM-N)

Inventor: FREITAG L

Patent Family (4 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
DE 10302310	A1	20040729	DE 10302310	A	20030120	200454	B
WO 2004064885	A2	20040805	WO 2004DE8	A	20040107	200454	E
US 20050061322	A1	20050324	US 2004981346	A	20041103	200526	E
EP 1587566	A2	20051026	EP 2004700437	A	20040107	200570	E
			WO 2004DE8	A	20040107		

Priority Applications (no., kind, date): DE 10302310 A 20030120

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
DE 10302310	A1	DE	8	5		
WO 2004064885	A2	DE				
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
EP 1587566	A2	DE			PCT Application	WO 2004DE8
					Based on OPI patent	WO 2004064885
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					

Alerting Abstract DE A1

NOVELTY - Method for reducing the volume of patient lungs in which a bronchial catheter (2) is connected to a suction device (3) and inserted in an over-swollen lung area,

after which the supplying bronchopulmonary is closed. Spontaneous patient breathing is detected and suction of air is synchronized with patient breathing in.
DESCRIPTION - An INDEPENDENT CLAIM is made for an arrangement for reducing the volume of patient lungs during breathing.
USE - Method for reducing the volume of patient lungs, when the patient is suffering from pulmonary emphysema.
ADVANTAGE - The inventive method ensures that air suction is correlated with patient breathing to prevent adverse effects occurring when the two are not correlated.
DESCRIPTION OF DRAWINGS - The figure shows an inventive arrangement for reducing patient lung volume during treatment.
2 bronchial catheter
3 suction device
5 breathing sensors
6 control unit
7 sound measurement sensor
8 nasal sensor
9 imaging device.

Title Terms /Index Terms/Additional Words: PATIENT; LUNG; REDUCE; METHOD; TREAT; PULMONARY; EMPHYSEMA; BRONCHIAL; CATHETER; INSERT; SWELLING; AREA; SUPPLY; CLOSE; SYNCHRONISATION; BREATH

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0016/04	A	I		R	20060101
A61M-0016/04	C	I		R	20060101

ECLA: A61M-016/04
ICO: K61M-016:04A1
US Classification, Current Main: 128-204180
US Classification, Issued: 128204.18
File Segment: EngPI; EPI;
DWPI Class: S05; P31; P34; P35
Manual Codes (EPI/S-X): S05-D01C1; S05-G02E

Dialog eLink: Order File History
6/5/92 (Item 85 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0014154129 *Drawing available*
WPI Acc no: 2004-339043/200431
Related WPI Acc No: 2005-424525; 2008-F34179
XRPX Acc No: N2004-271010

Cardiovascular-related condition diagnosing method, involves permitting person to breathe through valve system that increases blood pressure during inhalation, and measuring and evaluating physiological parameter

Patent Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N); CPRX LLC (CPRX-N)
Inventor: LURIE K G

Patent Family (5 patents, 104 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20040059229	A1	20040325	US 2002251080	A	20020920	200431	B
WO 2004026101	A2	20040401	WO 2003US29210	A	20030919	200431	E
AU 2003272477	A1	20040408	AU 2003272477	A	20030919	200462	E
US 6863656	B2	20050308	US 2002251080	A	20020920	200518	E
AU 2003272477	A8	20051027	AU 2003272477	A	20030919	200624	E

Priority Applications (no., kind, date): US 2002251080 A 20020920

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20040059229	A1	EN	11	6		
WO 2004026101	A2	EN				
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
AU 2003272477	A1	EN			Based on OPI patent	WO 2004026101
AU 2003272477	A8	EN			Based on OPI patent	WO 2004026101

Alerting Abstract US A1

NOVELTY - The method involves permitting a person to inhale and exhale through a valve system. The valve system produces a **vacuum** within **thorax** by decreasing a gas flow to the persons **lungs** and increases blood flow to **heart** for increasing **blood pressure** during inhalation. A physiological parameter is measured while the person inhales and exhales through the valve system, and the parameter are evaluated.
DESCRIPTION - An INDEPENDENT CLAIM is also included for a system for diagnosing a cardiovascular-related condition in a breathing person.
USE - Used for diagnosing a cardiovascular-related condition e.g. high blood pressure, pulmonary hypertension, cardiac function, and coronary artery disease in a breathing person.
ADVANTAGE - The valve system permits a persons cardiovascular system to be stressed without having the persons physical exercise, thereby providing the stressing of patients cardiovascular system in a more convenient and friendly manner. The valve permits a wide range of measurement of cardiovascular parameters. The person is coupled to the valve only, thereby allowing imaging and mapping techniques to measure the parameters.
DESCRIPTION OF DRAWINGS - The drawing shows a flow chart illustrating a method for diagnosing a cardiovascular-related condition.

Title Terms /Index Terms/Additional Words: CARDIOVASCULAR; RELATED; CONDITION; DIAGNOSE ; METHOD; PERMIT; PERSON; BREATH; THROUGH; VALVE; SYSTEM; INCREASE; BLOOD; PRESSURE; INHALE; MEASURE; EVALUATE; PHYSIOLOGICAL; PARAMETER

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61B-005/02			Main		"Version 7"
A61B-0005/0205	A	I		R	20060101
A61B-0005/097	A	I		R	20060101
A61B-0005/0205	C	I		R	20060101
A61B-0005/08	C	I		R	20060101

ECLA: A61B-005/0205, A61B-005/097
US Classification, Current Main: 600-481000; Secondary: 600-300000,

600-407000, 600-484000, 600-485000 , 600-500000, 600-529000, 600-532000
US Classification, Issued: 600481, 600485, 600407, 600532, 600481, 600484, 600529, 600500, 600485, 600300
File Segment: EngPI; EPI;
DWPI Class: S05; P31
Manual Codes (EPI/S-X): S05-D01B

Dialog eLink: Order File History
6/5/97 (Item 90 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0013804956 *Drawing available*
WPI Acc no: 2003-047089/200304
XRPX Acc No: N2003-037055
Anatomical airway ventilation intubating and resuscitating device has intubating lumen for accommodating endotracheal tube that can be inserted while enabling breathing of patient through ventilator lumen
Patent Assignee: ELISHA MEDICAL TECHNOLOGIES LTD (ELIS-N); GAITINI L (GAIT-I)
Inventor: GAITINI L

Patent Family (6 patents, 99 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2002092144	A2	20021121	WO 2002IL372	A	20020514	200304	B
US 20020170556	A1	20021121	US 2001858598	A	20010517	200305	E
US 6626169	B2	20030930	US 2001858598	A	20010517	200367	E
EP 1436032	A2	20040714	EP 2002730663	A	20020514	200446	E
			WO 2002IL372	A	20020514		
AU 2002302948	A1	20021125	AU 2002302948	A	20020514	200452	E
AU 2002302948	A8	20051013	AU 2002302948	A	20020514	200611	E

Priority Applications (no., kind, date): US 2001858598 A 20010517

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 2002092144	A2	EN	18	9		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
EP 1436032	A2	EN			PCT Application	WO 2002IL372
					Based on OPI patent	WO 2002092144
Regional Designated States,Original	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2002302948	A1	EN			Based on OPI patent	WO 2002092144
AU 2002302948	A8	EN			Based on OPI patent	WO 2002092144

Alerting Abstract WO A2
NOVELTY - The device (10) has an intubating lumen adapted to accommodate an endotracheal tube that can be inserted while enabling breathing of patient through a ventilator lumen. After the endotracheal tube is inserted, a first opening (24) at the distal end (16) of a flexible elongated conduit can be sealed while patient's breathing is directed through the endotracheal tube.
DESCRIPTION - The conduit is adapted to fit in a patient's oropharynx and partially divided by a septum into ventilation lumen and intubation lumen. The lumens are in fluid communication to the first opening at the distal end to be substantially opposite the laryngeal opening of the patient when inserted. A second opening (26) is provided at the proximate end of the conduit, and in fluid communication with the ventilation lumen.
USE - For ventilation, intubation, resuscitation and fiber-optic examination of the airway of patients.
ADVANTAGE - Can be used for inserting tube into trachea while allowing continuation of breathing, for insertion into the trachea of fiber-optic probe, and for resuscitation of patient by mouth or by mechanical ventilation device. Can be used in routine intervention and in cases of difficult introduction. Allows tracheal intubation aided by fiberoptic probe while providing simultaneous and continuous ventilation or oxygenation and preventing gastric dilation and preventing aspiration of the gastric fluid content. Seals patient's mouth and nose to allow positive pressure artificial ventilation if needed. Closely matches shape of orophraynx so that device can be painlessly and easily inserted even by paramedics and first-aid personnel. Can be used in emergency care of **cardiac** arrest, near

drowning, coma, trauma, and any circumstances where free **airway** ventilation is necessary and gastric **aspiration** must be prevented.
DESCRIPTION OF DRAWINGS - The figure shows the perspective view of the airway intubation device.
10 Airway intubation device
16 Distal end
24 First opening
26 Second opening

Title Terms /Index Terms/Additional Words: ANATOMICAL; AIRWAY; VENTILATION; INTUBATION; DEVICE; LUMEN; ACCOMMODATE; ENDOTRACHEAL; TUBE; CAN; INSERT; ENABLE; BREATH ; PATIENT; THROUGH

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M; A61M-011/00; A61M-016/00			Main		"Version 7"

ECLA: A61M-016/04, A61M-016/04M
ICO: K61M-016:00H, K61M-016:04A3
US Classification, Current Main: 128-200140
US Classification, Issued: 128200.14, 128200.14, 128202.27, 128207.14, 128206.26, 12810, 12811
File Segment: EngPI; ;
DWPI Class: P34

Dialog eLink: Order File History
6/5/98 (Item 91 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0013702456 *Drawing available*
WPI Acc no: 2003-799563/200375
XRPX Acc No: N2003-640532
Artificial respiratory synchronized with heart beat - in which each cycle has a fourth harmonic to increase the resonance of the chest and the heart

Patent Assignee: WANG W (WANG-I)
Inventor: WANG W

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
TW 529945	A	20030501	TW 2001119106	A	20010802	200375	B

Priority Applications (no., kind, date): TW 2001119106 A 20010802

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
TW 529945	A	ZH		1	

TW A
NOVELTY - Air pressure delivered by an artificial respiratory is synchronized with the heart beat. The heart beats at a cycle of the delivered air pressure of the respiratory. Each cycle has a fourth harmonic to enhance the resonance of the chest and the **heart**. During the contraction of the right **ventricle**, a corresponding **negative pressure** is discharged to increase the function of the **lung** circulation, in order to increase the efficiency of the **blood circulation**. A structure constituted of chambers for effectively achieving a desired cycle of air pressure is also disclosed.

Title Terms /Index Terms/Additional Words: ARTIFICIAL; RESPIRATION; SYNCHRONISATION; HEART; BEAT; CYCLE; FOURTH; HARMONIC; INCREASE; RESONANCE; CHEST

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61H-031/00			Main		"Version 7"

File Segment: EngPI; EPI;
DWPI Class: S05; P33
Manual Codes (EPI/S-X): S05-A05A

Dialog eLink: Order File History
6/5/99 (Item 92 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0013306295 *Drawing available*
WPI Acc no: 2003-393253/200337
XRAM Acc no: C2003-104368

Apparatus useful for the delivery of therapeutic gas e.g. nitric oxide for treating chronic pulmonary hypertension, comprises a non-electrolytic nitric oxide precursor receiver and a transport gas inlet

Patent Assignee: CYTERRA CORP (CYTE-N); FINE D H (FINE-I); JARVIS G (JARV-I); MACDONALD S J (MACD-I); ROLFE J L (ROLF-I); ROUNBEHLER D (ROUN-I); WHEELER D (WHEE-I); GENO LLC (GENO-N)
Inventor: FINE D H; JARVIS G; MACDONALD S J; ROLFE J L; ROUNBEHLER D; WHEELER D; ROUNBEHLER D R

Patent Family (11 patents, 99 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2003020211	A2	20030313	WO 2002US27278	A	20020828	200337	B
US 20030062043	A1	20030403	US 2001316964	P	20010905	200337	E
			US 2002228958	A	20020828		
US 20030064028	A1	20030403	US 2001316964	P	20010905	200337	E
			US 2002228956	A	20020828		
US 20030064115	A1	20030403	US 2001316964	P	20010905	200337	E
			US 2002229026	A	20020828		
EP 1429829	A2	20040623	EP 2002773248	A	20020828	200441	E
			WO 2002US27278	A	20020828		
AU 2002336401	A1	20030318	AU 2002336401	A	20020828	200452	E
AU 2002336401	A8	20051027	AU 2002336401	A	20020828	200624	E
US 7025869	B2	20060411	US 2002229026	A	20020828	200626	NCE
US 7040313	B2	20060509	US 2001316964	P	20010905	200632	E
			US 2002228958	A	20020828		
US 20060172018	A1	20060803	US 2001316964	P	20010905	200651	E
			US 2002229026	A	20020828		
			US 2006279029	A	20060407		
US 20070089739	A1	20070426	US 2001316964	P	20010905	200730	E
			US 2002228958	A	20020828		
			US 2006382116	A	20060508		

Priority Applications (no., kind, date): US 2001316964 P 20010905; US 2002228956 A

20020828; US 2002228958 A 20020828; US 2002229026 A 20020828; US 2006279029 A 20060407; US 2006382116 A 20060508

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 2003020211	A2	EN	22	6		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW					
US 20030062043	A1	EN			Related to Provisional	US 2001316964
US 20030064028	A1	EN			Related to Provisional	US 2001316964
US 20030064115	A1	EN			Related to Provisional	US 2001316964
EP 1429829	A2	EN			PCT Application	WO 2002US27278
					Based on OPI patent	WO 2003020211
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
AU 2002336401	A1	EN			Based on OPI patent	WO 2003020211
AU 2002336401	A8	EN			Based on OPI patent	WO 2003020211
US 7040313	B2	EN			Related to Provisional	US 2001316964
US 20060172018	A1	EN			Related to Provisional	US 2001316964
					Division of application	US 2002229026
					Division of patent	US 7025869
US 20070089739	A1	EN			Related to Provisional	US 2001316964
					Continuation of application	US 2002228958
					Continuation of patent	US 7040313

Alerting Abstract WO A2

NOVELTY - An apparatus contains a receptacle (130) having a therapeutic gas (TG)

outlet (145) and a non-electrolytic nitric oxide (NO) precursor receiver (135); and a transport gas inlet (170) fluidly communicating from a source of a transport gas to (145) through (135).
DESCRIPTION - INDEPENDENT CLAIMS are also included for:

1. delivering NO to a mammal by non-electrolytically generating (TG) from NO precursor, and transporting (TG) to the mammal;
2. a kit comprising NO precursor and instructional material, which describes a method of generating and transporting (TG);
3. NO generating composition comprising NO precursor contained within a matrix, which is non reactive with NO precursor;
4. administering NO to a mammal involving method (1) of generating (TG) including NO from NO precursor contained in the matrix, and transporting the (TG) stream to the mammal;
5. a unitary structure comprising a mixture of a matrix and several NO precursor particles contained in the matrix;
6. manufacturing the unitary structure for delivering NO involving combining a matrix and several NO precursor particles to form a mixture; and shaping the mixture to form the unitary structure;
7. preparing a formulation for delivering NO involving combining several NO precursor particles within a hydrophilic matrix;
8. delivering NO to a mammal involving disposing a cathode and an anode in a solution of NO precursor, applying a voltage across the cathode and anode to generate NO substantially devoid of nitrogen dioxide, and contacting a transport gas with the solution of NO precursor to form (TG), followed by transporting to the mammal;
9. delivering NO from an electrochemical cell to a mammal involving disposing a cathode and an anode in a solution of dilute nitric acid, where the anode is copper, followed by applying a voltage, and flowing a transport gas through the solution of dilute nitric acid to form (TG) including NO, followed by step transporting to the mammal;
10. an electrophoresis apparatus comprising a delivery portion, a reaction chamber in fluid communication with the delivery portion; and NO precursor receiving portion containing an electrophoresis region bounded by a first electrode and a second electrode arranged to migrate NO precursor to the reaction chamber when a voltage is applied across the first electrode and the second electrode; and
11. production of NO involving applying a voltage across a cavity including an electrophoresis region bound by a first electrode and a second electrode arranged to migrate NO precursor in the electrophoresis region to a reaction chamber, and contacting the NO precursor with a reaction solution in the reaction chamber to generate (TG) including NO.

ACTIVITY - Tranquilizer; Vulnerary; Antiinflammatory; Respiratory; Hypotensive; Thrombolytic; Antibacterial; Immunosuppressive; Antiasthmatic.
MECHANISM OF ACTION - None given.

USE - For delivering therapeutic gases e.g. nitric oxide useful for preventing, reversing or limiting progression of disorders including acute **pulmonary** vasoconstriction, traumatic injury, **aspiration** or inhalation injury, fat embolism in the **lung**, acidosis, inflammation of the lung, adult respiratory distress syndrome, acute pulmonary edema, acute mountain sickness, post **cardiac** surgery acute **pulmonary** hypertension, persistent **pulmonary** hypertension of a newborn, perinatal **aspiration** syndrome, haline membrane disease, acute **pulmonary** thromboembolism, heparin-protamine reactions, sepsis, asthma and status asthmatics and hypoxia. Also useful for treating chronic pulmonary hypertension, bronchopulmonary dysplasia, chronic pulmonary thromboembolism and idiopathic or primary pulmonary hypertension and chronic hypoxia.
ADVANTAGE - The apparatus delivers the therapeutic gas (including NO), which is substantially devoid of harmful side products including nitrogen dioxide. The apparatus controllably generates NO. The apparatus provides a constant level of drugs to the mammal, which optimizes the drug input rate into the systemic circulation, improves patient compliance, minimizes side effects and maximizes drug product efficacy. The controlled release of NO results in greater longevity of the NO precursor and longer availability of the NO precursor for its intended purpose while providing for greater control in the concentration of NO into the surrounding medium.
DESCRIPTION OF DRAWINGS - The figure shows a perspective view of the device.
130 Receptacle
135 Non-electrolytic nitric oxide precursor receiver
145 Therapeutic gas outlet
170 Transport gas inlet

Title Terms /Index Terms/Additional Words: APPARATUS; USEFUL; DELIVER; THERAPEUTIC; GAS ; NITRIC; OXIDE; TREAT; CHRONIC; PULMONARY; HYPERTENSIVE; COMPRISE; NON; ELECTROLYTIC; PRECURSOR; RECEIVE; TRANSPORT; INLET

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61K; A61K-033/00; A61M-016/00			Main		"Version 7"
A01D-0059/00	A	I	L	B	20060101
A61K-0033/00	A	I		R	20060101
A61K-0033/00	A	I	L	B	20060101
A61K-0033/24	A	I		R	20060101
A61K-0033/24	A	I	F	B	20060101
A61K-0033/30	A	I		R	20060101
A61K-0033/32	A	I	L	B	20060101
A61K-0033/34	A	I		R	20060101
A61K-0009/00	A	N		R	20060101
A61K-0009/20	A	I		R	20060101
A61K-0009/70	A	N		R	20060101
A61M-0016/00	A	I	F	B	20060101
A61M-0016/00	A	I	L	B	20060101
A61M-0016/10	A	I		R	20060101
A61M-0016/12	A	I		R	20060101
A62B-0021/00	A	I	L	B	20060101
A62B-0007/08	A	I	F	B	20060101
C25B-0001/22	A	I	F	B	20060101
A01D-0059/00	C	I	L	B	20060101
A61K-0033/00	C	I		R	20060101
A61K-0033/00	C	I	L	B	20060101
A61K-0033/24	C	I		R	20060101
A61K-0033/24	C	I	F	B	20060101
A61K-0033/30	C	I		R	20060101
A61K-0033/32	C	I	L	B	20060101
A61K-0033/34	C	I		R	20060101
A61K-0009/00	C	N		R	20060101
A61K-0009/20	C	I		R	20060101
A61K-0009/70	C	N		R	20060101
A61M-0016/00	C	I	L	B	20060101
A61M-0016/10	C	I		R	20060101
A62B-0021/00	C	I		B	20060101
A62B-0007/00	C	I		B	20060101
C25B-0001/00	C	I	F	B	20060101

ECLA: A61K-009/00M20, A61K-009/20H6D, A61K-009/20H6F, A61K-033/00, A61K-033/24, A61K-033/30, A61K-033/34, A61M-016/10, A61M-016/12
ICO: K61K-009:00M20, K61K-009:70B, K61M-202:02M1, K61M-209:06
US Classification, Current Main: 128-202260, 128-203120, 205-553000, 424-043000, 424-718000 ; Secondary: 128-204180, 128-204210, 424-617000, 424-641000, 424-718000
US Classification, Issued: 128203.12, 42443, 424718, 424718, 424617, 424641, 128202.26, 205553, 128204.18, 128204.21, 424718, 128203.12
File Segment: CPI; EngPI
DWPI Class: A96; B06; B07; P34; P35
Manual Codes (CPI/A-N): A12-V01; A12-V03; B04-C02; B04-C03; B05-A03A; B05-B02A3; B05-C01; B05-C02; B05-C03; B05-C07; B10-C02; B10-C04E; B11-C04; B11-C08B; B11-C08D1; B12-M01B; B14-C03; B14-K01

Dialog eLink: Order File History
6/5/100 (Item 93 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0013284960 *Drawing available*
WPI Acc no: 2003-371349/200335
Related WPI Acc No: 1995-193914; 1996-433571; 2000-421466; 2002-139260; 2002-641994; 2002-681034; 2003-030322; 2003-310772; 2003-766762; 2004-709334; 2004-747424; 2004-756946; 2004-756947; 2004-776032; 2005-541393; 2005-617813; 2008-K89814
XRAM Acc no: C2003-098421
XRPX Acc No: N2003-296207

Increasing blood circulation in breathing person, involves interfacing valve system to airway to decrease respiratory gas flow to lungs and permitting person to inhale and exhale through system

Patent Assignee: ADVANCED CIRCULATORY SYSTEMS INC (ADCI-N); CPRX LLC (CPRX-N)
Inventor: LURIE K G

Patent Family (3 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20030037784	A1	20030227	US 1993149203	A	19931109	200335	B
			US 1995403009	A	19950310		
			US 1997950702	A	19971015		
			US 2000546252	A	20000410		
			US 2001854238	A	20010511		
			US 2002119203	A	20020408		
			US 2002224263	A	20021105		
US 20040016428	A9	20040129	US 1993149203	A	19931109	200413	E
			US 1995403009	A	19950310		
			US 1997950702	A	19971015		
			US 2000546252	A	20000410		
			US 2001854238	A	20010511		
			US 2002119203	A	20020408		
			US 2002224263	A	20021105		
US 6986349	B2	20060117	US 1993149204	A	19931109	200606	E
			US 1995403009	A	19950310		
			US 1997950702	A	19971015		
			US 2000546252	A	20000410		
			US 2001854238	A	20010511		
			US 2002119203	A	20020408		
			US 2002224263	A	20020819		

Priority Applications (no., kind, date): US 1993149203 A 19931109; US 1993149204 A 19931109; US 1995403009 A 19950310; US 1997950702 A 19971015; US 2000546252 A 20000410; US 2001854238 A 20010511; US 2002119203 A 20020408; US 2002224263 A 20020819; US 2002224263 A 20021105

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20030037784	A1	EN	54	54	C-I-P of application	US 1993149203
					C-I-P of application	US 1995403009
					C-I-P of application	US 1997950702
					C-I-P of application	US 2000546252
					C-I-P of application	US 2001854238
					C-I-P of application	US 2002119203
					C-I-P of patent	US 5441658
					C-I-P of patent	US 5692498
					C-I-P of patent	US 6062219
US 20040016428	A9	EN			C-I-P of application	US 1993149203
					C-I-P of application	US 1995403009
					C-I-P of application	US 1997950702
					C-I-P of application	US 2000546252
					C-I-P of application	US 2001854238
					C-I-P of application	US 2002119203
					C-I-P of patent	US 5441658
					C-I-P of patent	US 5692498
					C-I-P of patent	US 6062219
					C-I-P of patent	US 6526973
					C-I-P of patent	US 6604523
US 6986349	B2	EN			C-I-P of application	US 1993149204
					C-I-P of application	US 1995403009
					Continuation of application	US 1997950702
					C-I-P of application	US 2000546252
					C-I-P of application	US 2001854238
					C-I-P of application	US 2002119203
					C-I-P of patent	US 5551420
					C-I-P of patent	US 5692498
					Continuation of patent	US 6062219
					C-I-P of patent	US 6526973
					C-I-P of patent	US 6604523

Alerting Abstract US A1

NOVELTY - Increasing blood circulation in a breathing person comprises interfacing a valve system (VS) to the persons airway. The VS is configured to decrease or prevent respiratory gas flow to lungs during an inhalation event. The person is permitted to inhale and exhale through the VS. During inhalation, the VS is produces a **vacuum** within the **thorax** to increase blood flow back to the right **heart**, increasing **cardiac** output and **blood circulation**.

USE - Used for increasing blood circulation to treat disease such as venous statis ulcers, deep vein thrombosis, wound healing and lymphedema (claimed) and renal failure and useful for a person having low blood pressure due to blood loss, due to administration of a drug, due to a high gravitational state, due to vasodepressor syncope, due to drowning, due to heat stroke, due to heart attack, due to hypothermia, right heart failure, after return to earth from space sepsis, pericardial effusion, and cardiac tamponade.

ADVANTAGE - The method spontaneously increases the blood circulation in a breathing person and increases the magnitude and prolongs the duration of negative intrathoracic pressure in the chest. The valve system provides a safety ventilation passage. The method prevents foreign (outside) air from flowing to lungs during attempted inhalations to improve and sustain the duration of negative intrathoracic pressure and improve blood oxygenation and cardiopulmonary circulation.

DESCRIPTION OF DRAWINGS - The figure shows a schematic view of a valving system for regulating airflow into a patient's lungs.

100 Valving system

Title Terms /Index Terms/Additional Words: INCREASE; BLOOD; CIRCULATE; BREATH; PERSON; INTERFACE; VALVE; SYSTEM; AIRWAY; DECREASE; RESPIRATION; GAS; FLOW; LUNG; PERMIT; INHALE; EXHALATION; THROUGH

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61B-0005/02	A	I	L	B	20060101
A61H-0031/00	A	I		R	20060101
A61M-0016/00	A	I		R	20060101
A61M-0016/00	A	I	F	B	20060101
A61M-0016/04	A	I		R	20060101
A61M-0016/20	A	I		R	20060101
C09K-0005/04	A	I		R	20060101
F25B-0031/00	A	I		R	20060101
F25B-0009/00	A	I		R	20060101
F25B-0009/02	A	I		R	20060101
A61B-0005/02	C	I	L	B	20060101
A61H-0031/00	C	I		R	20060101
A61M-0016/00	C	I		R	20060101
A61M-0016/00	C	I	L	B	20060101
A61M-0016/04	C	I		R	20060101
A61M-0016/20	C	I		R	20060101
C09K-0005/00	C	I		R	20060101
F25B-0031/00	C	I		R	20060101
F25B-0009/00	C	I		R	20060101
F25B-0009/02	C	I		R	20060101

ECLA: A61H-031/00, A61M-016/00, A61M-016/04, A61M-016/20, C09K-005/04B2
ICO: K61M-016:00A11, K61M-016:00M1S, K61M-016:20A2, K61M-016:20B
US Classification, Current Main: 128-202280; Secondary: 128-202290, 128-203110, 128-205240, 600-484000 , 600-485000
US Classification, Issued: 128203.11, 128202.28, 128202.29, 128203.11, 128205.24, 600484, 600485, 128202.28
File Segment: CPI; EngPI
DWPI Class: B07; P31; P34
Manual Codes (CPI/A-N): B11-C04; B14-F02; B14-K01

Dialog eLink: Order File History
6/5/102 (Item 95 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0013025441 *Drawing available*
WPI Acc no: 2003-104204/200310
XRPX Acc No: N2003-083070

Artificial thorax for housing an animal heart and lungs preparation for experimental development of X-ray and magnetic resonance diagnostic imaging methods has a vacuum pressure applied so that the lungs are not collapsed

Patent Assignee: BIEDERER J (BIED-I)
Inventor: BIEDERER J

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
DE 10121159	A1	20021121	DE 10121159	A	20010430	200310	B
DE 10121159	B4	20040129	DE 10121159	A	20010430	200408	E

Priority Applications (no., kind, date): DE 10121159 A 20010430

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
DE 10121159	A1	DE	8	5	

Alerting Abstract DE A1
NOVELTY - Artificial thorax for housing an animal heart and lung preparation with lower and upper shells (12) with at least one opening for generating a vacuum pressure within the gas-tight container formed by the two shells and an opening for introduction of a tracheal tube into the air pipe of the preparation.
DESCRIPTION - Application of a vacuum pressure allows the lungs to be seen in their normal state, a blood replacement can be circulated through the blood vessels and breathing can be simulated by application of a ventilator to the air pipe.
USE - An artificial thorax for housing an animal heart and lungs preparation for experimental development of X-ray and magnetic resonance diagnostic imaging methods.
ADVANTAGE - Application of a vacuum pressure allows the lungs to be visualized in normal i.e. uncollapsed state.
DESCRIPTION OF DRAWINGS - The figure shows the upper shell of the sealing container.
12 Upper shell of container

Title Terms /Index Terms/Additional Words: ARTIFICIAL; THORAX; HOUSING; ANIMAL; HEART; LUNG; PREPARATION; EXPERIMENT; DEVELOP; RAY; MAGNETIC; RESONANCE; DIAGNOSE; IMAGE; METHOD; VACUUM;

PRESSURE; APPLY; SO; COLLAPSE

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61B-005/08			Main		"Version 7"
G01N-033/497			Secondary		"Version 7"

ECLA: A61B-006/02
ICO: K61B-005:055
File Segment: EngPI; EPI;
DWPI Class: S03; S05; P31
Manual Codes (EPI/S-X): S03-E14H6; S05-D02A; S05-D02B; S05-X

Dialog eLink: Order File History
6/5/103 (Item 96 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0012902710 *Drawing available*
WPI Acc no: 2002-089720/200212
XRPX Acc No: N2002-066144
Method of determining respiratory system resistance for use during inspiration in mechanically ventilated patients, generates a value, allowing for the presence of pressure in respiratory muscles without knowing its actual value
Patent Assignee: UNIV MANITOBA (UYMA-N); YOUNES M (YOUN-I)
Inventor: YOUNES M

Patent Family (7 patents, 94 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 2001083014	A2	20011108	WO 2001CA578	A	20010425	200212	B
AU 200154562	A	20011112	AU 200154562	A	20010425	200222	E
EP 1276531	A2	20030122	EP 2001927533	A	20010425	200308	E
			WO 2001CA578	A	20010425		
US 20030159695	A1	20030828	WO 2001CA578	A	20010425	200357	E
			US 2003258348	A	20030224		
JP 2003531694	W	20031028	JP 2001579885	A	20010425	200373	E
			WO 2001CA578	A	20010425		
US 6837242	B2	20050104	US 2000199824	P	20000426	200503	E
			WO 2001CA578	A	20010425		
			US 2003258348	A	20030224		
JP 3713240	B2	20051109	JP 2001579885	A	20010425	200574	E
			WO 2001CA578	A	20010425		

Priority Applications (no., kind, date): US 2000199824 P 20000426; US 2003258348 A 20030224

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 2001083014	A2	EN	34	3		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States,Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200154562	A	EN			Based on OPI patent	WO 2001083014
EP 1276531	A2	EN			PCT Application	WO 2001CA578
					Based on OPI patent	WO 2001083014
Regional Designated States,Original	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 20030159695	A1	EN			PCT Application	WO 2001CA578
JP 2003531694	W	JA	52		PCT Application	WO 2001CA578
					Based on OPI patent	WO 2001083014
US 6837242	B2	EN			Related to Provisional	US 2000199824
					PCT Application	WO 2001CA578
					Based on OPI patent	WO 2001083014
JP 3713240	B2	JA	29		PCT Application	WO 2001CA578
					Previously issued patent	JP 2003531694
					Based on OPI patent	WO 2001083014

Alerting Abstract WO A2

NOVELTY - During selected inflation cycles, a negative pulse in the pressure and/or flow output of the ventilator (10) is generated and airway pressure (PAW), flow (Vdot) and volume (V) are measured near the beginning of the pulse, at a point near the trough of the pulse and at a point preceding the pulse and used to calculate the value of respiratory system resistance.

DESCRIPTION - An INDEPENDENT CLAIM is also included for an apparatus which interfaces with ventilatory assist devices determining respiratory system resistance.

USE - For use in mechanical ventilation of patients.

ADVANTAGE - By using the change in pressure in respiratory muscles in the interval immediately preceding the intervention to predict the behaviour of pressure in respiratory muscles during the intervention, all information required to determine respiratory system

resistance can be obtained from a single intervention, thus greatly reducing computational requirements and the time required to obtain information that is useful.
DESCRIPTION OF DRAWINGS - The figure is a schematic representation of apparatus for determining respiratory system resistance.
10 Ventilator.

Title Terms /Index Terms/Additional Words: METHOD; DETERMINE; RESPIRATION; SYSTEM; RESISTANCE; INSPIRATION; MECHANICAL; VENTILATION; PATIENT; GENERATE; VALUE; ALLOW; PRESENCE; PRESSURE; MUSCLE; ACTUAL

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-016/00			Main		"Version 7"
A62B-007/00; F16K-031/02			Secondary		"Version 7"

ECLA: A61M-016/00
ICO: K61M-016:00A11, K61M-016:00A19, K61M-016:00K
US Classification, Current Main: 128-204180, 128-204220; Secondary: 128-204180, 128-204210, 128-204230 , 128-204260
US Classification, Issued: 128204.18, 128204.22, 128204.18, 128204.21, 128204.23, 128204.26

Japan National Classification FI Terms			
FI Term	**Facet**	**Rank**	**Type**
A61M-016/00 343			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C103		

File Segment: EngPI; EPI;
DWPI Class: S05; P34; P35; Q66
Manual Codes (EPI/S-X): S05-A05A; S05-D01C1

Dialog eLink: Order File History
6/5/106 (Item 99 from file: 350)
DIALOG(R)File 350: Derwent WPIX

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0012362077 *Drawing available*
WPI Acc no: 2002-304751/200234
XRPX Acc No: N2002-238452

Disposable cartridge has housing defining internal passageways connected to cardiopulmonary, cardioplegia, and suction circuits

Patent Assignee: CARSON G A (CARS-I); COBE CARDIOVASCULAR INC (COBE-N); ELLINGBOE B S (ELLI-I); KAPPUS J J (KAPP-I); KOLLAR K J (KOLL-I); SORIN GROUP USA INC (SORI-N)
Inventor: CARSON G; CARSON G A; ELLINGBOE B; ELLINGBOE B S; KAPPUS J; KAPPUS J J; KOLLAR K; KOLLAR K J

Patent Family (8 patents, 96 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2002026288	A2	20020404	WO 2001US42355	A	20010926	200234	B
AU 200211821	A	20020408	AU 200211821	A	20010926	200252	E
EP 1322352	A2	20030702	EP 2001979904	A	20010926	200344	E
			WO 2001US42355	A	20010926		
US 20030135152	A1	20030717	US 2000235838	P	20000927	200348	E
			US 2001963793	A	20010926		
AU 2002211821	A8	20050915	AU 2002211821	A	20010926	200569	E
US 20060015056	A1	20060119	US 2000235838	P	20000927	200607	E
			US 2001963793	A	20010926		
			US 2005130872	A	20050517		
US 7278981	B2	20071009	US 2001963793	A	20010926	200768	NCE
			US 2005130872	A	20050517		
US 20080027368	A1	20080131	US 2000235838	P	20000927	200810	E
			US 2001963793	A	20010926		
			US 2005130872	A	20050517		
			US 2007869451	A	20071009		

Priority Applications (no., kind, date): US 2000235838 P 20000927; US 2001963793 A 20010926; US 2005130872 A 20050517; US 2007869451 A 20071009

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 2002026288	A2	EN	188	91		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
Regional Designated States,Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200211821	A	EN			Based on OPI patent	WO 2002026288
EP 1322352	A2	EN			PCT Application	WO 2001US42355
					Based on OPI patent	WO 2002026288
Regional Designated States,Original	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 20030135152	A1	EN			Related to Provisional	US 2000235838
AU 2002211821	A8	EN			Based on OPI patent	WO 2002026288
US 20060015056	A1	EN			Related to Provisional	US 2000235838
					Continuation of application	US 2001963793
US 7278981	B2	EN			Continuation of application	US 2001963793
US 20080027368	A1	EN			Related to Provisional	US 2000235838
					Continuation of application	US 2001963793
					Continuation of application	US 2005130872
					Continuation of patent	US 7278981

Alerting Abstract WO A2

NOVELTY - The disposable cartridge (120) comprises a housing defining internal passageways configured for connection to cardiopulmonary, cardioplegia, and suction circuits. A filter and bubble tray are configured to filter and remove bubbles from the fluid flowing through at least one of the passageways, and a translucent material allows for internal viewing of the passageways.

USE - In extracorporeal blood perfusions systems for controlling the flow of fluids.

ADVANTAGE - Provides simplified set-up and interconnection/disconnection, and personnel with enhanced/simplified monitoring.

DESCRIPTION OF DRAWINGS - The drawing show the front perspective view of the disposable cartridge.
120 Cartridge.

Title Terms /Index Terms/Additional Words: DISPOSABLE; CARTRIDGE; HOUSING; DEFINE; INTERNAL; PASSAGE; CONNECT; CARDIOPLEGIA; SUCTION; CIRCUIT

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-001/00			Main		"Version 7"
A61M-0001/00	A	I	L	B	20060101
A61M-0001/14	A	I	F	B	20060101
A61M-0001/36	A	I		R	20060101
A61M-0037/00	A	I	F	B	20060101
C02F-0001/44	A	N	L	B	20060101
F04B-0045/06	A	I	L	B	20060101
A61M-0001/00	C	I	L	B	20060101
A61M-0001/14	C	I	F	B	20060101
A61M-0001/36	C	I		R	20060101
A61M-0037/00	C	I	F	B	20060101
A61M-0037/00	C	I	L	B	20060101
C02F-0001/44	C	N	L	B	20060101
F04B-0045/00	C	I	L	B	20060101

ECLA: A61M-001/36C, A61M-001/36C6
ICO: K61M-001:36C10, K61M-001:36C2, K61M-001:36C4C, K61M-001:36C5, K61M-001:36C9 , K61M-205:12B, K61M-205:12V, K61M-205:33V3, K61M-205:50A1, K61M-205:70F1, K61M-205:70F2, K61M-209:08A
US Classification, Current Main: 604-004010, 604-006110, 604-006140, 604-035000; Secondary: 417-477200 , 604-004010, 604-006110, 604-006130, 604-006160, 604-035000, 604-153000
US Classification, Issued: 60435, 6046.11, 60435, 6044.01, 6046.14, 6044.01, 6046.11, 6046.13, 6046.16 , 604153, 417477.2
File Segment: EngPI; ;
DWPI Class: P34; Q56

Dialog eLink: Order File History
6/5/113 (Item 106 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0010284867 *Drawing available*
WPI Acc no: 2000-598149/200057
XRPX Acc No: N2000-443242
Artificial heart and lung machine used for cardiac surgery operation, has negative pressure device connected with defoaming chamber and keeps inside pressure of defoaming chamber into negative pressure
Patent Assignee: SENKO MED INSTR MFG (SENK-N)
Inventor: KUWANA K

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
JP 2000245829	A	20000912	JP 199957704	A	19990304	200057	B

Priority Applications (no., kind, date): JP 199957704 A 19990304

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
JP 2000245829	A	JA	7	7	

Alerting Abstract JP A
NOVELTY - A suction line (13) collects the blood coming a patient during an operation. A defoaming chamber (14) is connected to the downstream side of the suction line. A negative pressure device (16) is connected with the defoaming chamber, and keeps the inside pressure of the defoaming chamber into a negative pressure.
USE - Used for cardiac surgery operation.
ADVANTAGE - Enables shortening the length of the suction line. Minimizes the amount of blood flowing out from body of patient during the operation. Enables making the suction speed appropriate. Eliminates necessity of using roller pumps, thus reducing the area occupied by the machine.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the artificial heart and lung machine.
13 Suction line
14 Defoaming chamber
16 Negative pressure device

Title Terms /Index Terms/Additional Words: ARTIFICIAL; HEART; LUNG; MACHINE; CARDIAC; SURGICAL; OPERATE; NEGATIVE; PRESSURE; DEVICE; CONNECT; DEFOAM; CHAMBER; KEEP

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0001/14	A	I	F	R	20060101
A61M-0001/36	A	I	L	R	20060101
A61M-0001/14	C	I	F	R	20060101
A61M-0001/36	C	I	L	R	20060101

Japan National Classification FI Terms			
FI Term	**Facet**	**Rank**	**Type**
A61M-001/14 580			
A61M-001/36 520			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C077		
4C077	AA02	
4C077	BB06	
4C077	CC03	
4C077	DD11	
4C077	DD13	
4C077	EE01	
4C077	HH10	
4C077	HH13	
4C077	JJ03	
4C077	JJ09	
4C077	JJ13	
4C077	JJ22	
4C077	KK23	

File Segment: EngPI; ;
DWPI Class: P34

Dialog eLink: Order File History
6/5/114 (Item 107 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0010260131 *Drawing available*
WPI Acc no: 2000-572564/200054
Related WPI Acc No: 2000-579684
XRPX Acc No: N2000-423606

Transabdominal surgical apparatus for performing cardiac surgery has heart manipulator setting heart in any stable position through negative pressure force, and transabdominal channel which, is set in any stable position and orientation

Patent Assignee: CARTIER R (CART-I); CORONEO INC (CORO-N); PAOLITTO A (PAOL-I); VALENTINI V (VALE-I)
Inventor: CARTIER R; PAOLITTO A; VALENTINI V

Patent Family (5 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
CA 2261488	A1	20000721	CA 2261488	A	19990121	200054	B
US 6478028	B1	20021112	US 2000488557	A	20000121	200278	E
US 20030010346	A1	20030116	US 2000488557	A	20000121	200308	E
			US 2002243764	A	20020916		
US 7264000	B2	20070904	US 2000488557	A	20000121	200759	E
			US 2002243764	A	20020916		
US 20080015408	A1	20080117	US 2000488557	A	20000121	200807	E
			US 2002243764	A	20020916		
			US 2007829267	A	20070727		

Priority Applications (no., kind, date): CA 2261488 A 19990121

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
CA 2261488	A1	EN	43	12		
US 20030010346	A1	EN			Continuation of application	US 2000488557
					Continuation of patent	US 6478028
US 7264000	B2	EN			Continuation of application	US 2000488557
					Continuation of patent	US 6478028
US 20080015408	A1	EN			Continuation of application	US 2000488557
					Continuation of application	US 2002243764
					Continuation of patent	US 6478028
					Continuation of patent	US 7264000

Alerting Abstract CA A1
NOVELTY - The apparatus (1) has a **heart** manipulator (20) for setting the beating **heart** in any stable position and orientation in a closed-**chest pleural** work space, through a **negative pressure** force applied to at least a portion of the beating **heart**. A hollow transabdominal channel has at least one access lumen to the heart manipulator into the pleural workspace. A securing platform (50) sets the channel in any stable position and orientation relative to the pleural work space and surgical table.
DESCRIPTION - The heart manipulator has:

1. at least one tissue-engaging sheath capable of providing negative pressure suction force on at least a portion of the beating heart;
2. an extracorporeal device manipulation handle providing the surgeon the ability the set the beating heart once engagement with the tissue-engaging sheath is achieved; and
3. a conduit member for communicating the negative pressure from the proximal device source to the distal tissue-engaging sheath within the pleural workspace.

The transabdominal channel has at least one articulation mechanism for setting the heart manipulator in any stable position and orientation relative to the channel. The heart manipulator is slidingly, pivotingly and rotatingly connectable to the transabdominal channel and the securing platform is pivotally connectable to the surgical table.
USE - For performing closed chest cardiac surgery.
ADVANTAGE - Can cater the entire demographically representative group of patients without the invasive aspects of ECC and median sternotomy, that achieves complete revascularization. Cost effective in lowering the initial healthcare costs of the procedure and minimizes future costs by reducing likelihood of reintervention.
DESCRIPTION OF DRAWINGS - The figure shows a frontal view of the patient with a sectioned thoracic cavity illustrating an embodiment of the transabdominal surgical apparatus.

1 Transabdominal surgical apparatus
20 Heart manipulator
50 Securing platform

Title Terms /Index Terms/Additional Words: SURGICAL; APPARATUS; PERFORMANCE; CARDIAC; HEART; MANIPULATE; SET; STABILISED; POSITION; THROUGH; NEGATIVE; PRESSURE; FORCE; CHANNEL; ORIENT

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61B-0017/00	A	I	F	B	20060101
A61B-0017/00	A	I		R	20060101
A61B-0017/02	A	N		R	20060101
A61B-0017/28	A	N		R	20060101
A61B-0017/30	A	N		R	20060101
A61B-0017/32	A	N		R	20060101
A61B-0017/34	A	I		R	20060101
A61B-0019/00	A	I	F	B	20060101
A61B-0019/00	A	N		R	20060101
A61B-0017/00	C	I	F	B	20060101
A61B-0017/00	C	I		R	20060101
A61B-0017/02	C	N		R	20060101
A61B-0017/28	C	N		R	20060101
A61B-0017/30	C	N		R	20060101
A61B-0017/32	C	N		R	20060101
A61B-0017/34	C	I		R	20060101
A61B-0019/00	C	I	F	B	20060101
A61B-0019/00	C	N		R	20060101

ECLA: A61B-017/00E, A61B-017/04E, A61B-017/11, A61B-017/34G4
ICO: K61B-017:00E1C, K61B-017:00E1C2B, K61B-017:00E6, K61B-017:02E, K61B-017:02H2, K61B-017:02R, K61B-017:06H, K61B-017:11B, K61B-017:11P, K61B-017:28E, K61B-017:28E4B, K61B-017:30S, K61B-017:30S2, K61B-017:32H, K61B-017:34G4M, K61B-019:00H
US Classification, Current Main: 128-898000, 600-037000; Secondary: 600-221000, 604-024000, 606-130000
US Classification, Issued: 128898, 60037.0, 60424.0, 606130.0, 600221, 128898, 128898

File Segment: EngPI; ;
DWPI Class: P31

Dialog eLink: Order File History
6/5/117 (Item 110 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0010092881 *Drawing available*
WPI Acc no: 2000-399596/200034
XRPX Acc No: N2000-299357
Pressure control valve for artificial heart-lung machine, has vacuum pressure control valve with finely adjustable damper
Patent Assignee: SUZUKI K (SUZU-I)
Inventor: SUZUKI M

Patent Family (3 patents, 88 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2000028394	A1	20000518	WO 1999JP6205	A	19991108	200034	B
AU 200010789	A	20000529	AU 200010789	A	19991108	200041	E
JP 2000581515	X	20020219	WO 1999JP6205	A	19991108	200229	E
			JP 2000581515	A	19991108		

Priority Applications (no., kind, date): JP 1998331931 A 19981109

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 2000028394	A1	JA	57	21		
National Designated States,Original	AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States,Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
AU 200010789	A	EN			Based on OPI patent	WO 2000028394
JP 2000581515	X	JA			PCT Application	WO 1999JP6205
					Based on OPI patent	WO 2000028394

Alerting Abstract WO A1
NOVELTY - A reservoir internal-pressure control device for artificial **heart** and **lung** devices comprises a **vacuum** pressure control valve (7) with a grease-utilizing, powerful, finely-adjustable damper (10). This is driven by the pressure from a controlled object. A vacuum circuit is operated by the vacuum control valve to feed air to a negative pressure source.
DESCRIPTION - An INDEPENDENT CLAIM is included for a device using the pressure control valve.
USE - For artificial heart-lung machine.
ADVANTAGE - Can be used when a **vacuum** pressure in the dehematizing reservoir of an artificial **heart-lung** machine need be controlled in the same accurate and delicate manner as a **blood pressure**.
DESCRIPTION OF DRAWINGS - The figure shows a side sectional view of the device.
7 Valve
10 Damper

Title Terms /Index Terms/Additional Words: PRESSURE; CONTROL; VALVE; ARTIFICIAL; HEART; LUNG; MACHINE; VACUUM; FINE; ADJUST; DAMP

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0001/36	A	I		R	20060101
A61M-0001/36	C	I		R	20060101

ECLA: A61M-001/36C99
File Segment: EngPI; EPI;
DWPI Class: T06; P34
Manual Codes (EPI/S-X): T06-B11A

Dialog eLink: Order File History
6/5/119 (Item 112 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0009797212 *Drawing available*
WPI Acc no: 2000-086180/200007
Related WPI Acc No: 2001-549064; 2001-580354
XRPX Acc No: N2000-067640
Suction support for providing countertraction to body tissue during surgery
Patent Assignee: EMBOL-X INC (EMBO-N)
Inventor: MANGOSONG L

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6007523	A	19991228	US 1998161937	A	19980928	200007	B

Priority Applications (no., kind, date): US 1998161937 A 19980928

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6007523	A	EN	7	4	

Alerting Abstract US A
NOVELTY - An arcuate component (17) contains a continuous slot that communicates with the lumen of the arcuate component. The lumen of the arcuate component communicates with the lumen (4) of an elongate component (20).
DESCRIPTION - The elongate component and the arcuate component are joined at approximately 90 degree angle. The arcuate component has each of its suction ports positioned at the center of a suction cup (18). The distal end of the elongate component includes a retractable surgical blade (53).
An INDEPENDENT CLAIM is also included for body tissue stabilizing method.
USE - For providing countertraction to body tissue during surgery.
ADVANTAGE - Simplifies surgical method for cannulation for **cardiopulmonary** by-pass (CPB). Allows attachment of suction support to trocar for visualization into **chest**

cavity of patient. Provides better **vacuum** seal between the arcuate component and a body tissue.
DESCRIPTION OF DRAWINGS - The figure shows the lateral view of the suction support.
4 Lumen
17 Arcuate component
18 Suction cup
20 Elongate component
53 Retractable surgical blade

Title Terms /Index Terms/Additional Words: SUCTION; SUPPORT; BODY; TISSUE; SURGICAL

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-025/00			Main		"Version 7"

ECLA: A61M-025/00R, A61M-025/00T
ICO: K61B-017:00E1C, K61M-001:00T, K61M-027:00C1A, K61M-215:10
US Classification, Current Main: 604-284000; Secondary: 128-898000, 600-201000, 604-315000
US Classification, Issued: 604284, 604315, 128898, 600201
File Segment: EngPI; ;
DWPI Class: P34

Dialog eLink: Order File History
6/5/120 (Item 113 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0009688230
WPI Acc no: 1999-152859/199913
Related WPI Acc No: 2000-646674
XRAM Acc no: C1999-045080
Enhancing transport of gases in tissues - using stabilized gaseous microbubbles, for transport of e.g. oxygen, anaesthetic gas, nitrous oxide or nitrogen
Patent Assignee: UNIV NEW YORK STATE RES FOUND (UYNY)
Inventor: BURKARD M E; LUNDGREN C E G; TYSSEBOTN I M; VAN LIEW H D

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 5869538	A	19990209	US 1996753581	A	19961126	199913	B

Priority Applications (no., kind, date): US 1996753581 A 19961126

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
US 5869538	A	EN	31	17	

Alerting Abstract US A
Transporting in blood vessels at least one gas selected from respiratory gas, an inert gas from a breathing mixture, an anesthetic gas or a toxic gas comprises introducing stabilized gaseous microbubbles into the blood vessels. The method is used to deliver oxygen to oxygen depleted tissues, reversing the effects of lack of functional haemoglobin, minimizing ischaemia in an organ intended for transplantation, ameliorating ischaemia during coronary angioplasty or following a myocardial infarct, improving the efficacy of anticancer therapy of solid tumours, anaesthetizing a patient, removing inert gas from tissues and reversing hypoxia caused by shunting blood past the lungs. The method may optionally include simultaneous oxygen inhalation therapy.
USE - The method is used to deliver or remove from tissues at least one gas selected from a respiratory gas e.g. O2, an anesthetic gas e.g. N2O, an inert gas e.g. N2 or a toxic gas where the microbubbles act as "gas carriers".

Title Terms /Index Terms/Additional Words: ENHANCE; TRANSPORT; GAS; TISSUE; OXYGEN; ANAESTHETIC; NITROUS; OXIDE; NITROGEN

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61K-0031/02	A	I		R	20060101
A61K-0033/00	A	I		R	20060101
A61K-0009/00	A	I		R	20060101
A61K-0031/02	C	I		R	20060101
A61K-0033/00	C	I		R	20060101
A61K-0009/00	C	I		R	20060101

ECLA: A61K-009/00M5F, A61K-031/02, A61K-033/00
US Classification, Current Main: 514-743000; Secondary: 514-746000, 514-749000
US Classification, Issued: 514743, 514746, 514749
File Segment: CPI

DWPI Class: B06; B07; D22
Manual Codes (CPI/A-N): B10-H02; B10-H02B; B14-C07; B14-F02D; D09-C

Dialog eLink: Order File History
6/5/121 (Item 114 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0009581988 *Drawing available*
WPI Acc no: 1999-529888/199945
XRPX Acc No: N1999-392717
System for supporting body blood circulation and relieving heart using vacuum exerted on body of patient with chamber for accommodating patient provided with respiration system
Patent Assignee: DEIWALD J (DEIW-I)
Inventor: DEIWALD J

Patent Family (2 patents, 25 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 945116	A2	19990929	EP 1999106092	A	19990326	199945	B
DE 19813836	A1	19991007	DE 19813836	A	19980327	199947	E

Priority Applications (no., kind, date): DE 19813836 A 19980327

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
EP 945116	A2	DE	14	4	
Regional Designated States,Original	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI				

Alerting Abstract EP A2
NOVELTY - The body of the patient (32) is arranged in a chamber (1) filled with liquid, and a vacuum producible by a vacuum pump system (18) reacts pulsing and synchronized to the patient heart beat on the body of the patient for relieving the heart. The patient is provided with a breathing mask with which, in respiration volumes formed by the breathing mask and the patient, heart beat synchronous vacuum pulses are producible.
USE - Assisting body (lung) blood circulation and relieving heart.
ADVANTAGE - The system in addition to assisting blood circulation also relieves the heart of a patient.

DESCRIPTION OF DRAWINGS - The drawing shows a combination of chamber and breathing mask, for the simultaneous support as well as the body, also the lung blood circulation.
1 Chamber
7 Compensation container
18 Vacuum producer
32 Patient

Title Terms /Index Terms/Additional Words: SYSTEM; SUPPORT; BODY; BLOOD; CIRCULATE; RELIEVE; HEART; VACUUM; EXERT; PATIENT; CHAMBER; ACCOMMODATE; RESPIRATION

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61H-0031/00	A	I		R	20060101
A61H-0009/00	A	I		R	20060101
A61M-0016/00	A	N		R	20060101
A61H-0031/00	C	I		R	20060101
A61H-0009/00	C	I		R	20060101
A61M-0016/00	C	N		R	20060101

ECLA: A61H-009/00P, A61H-031/00
ICO: K61H-230:04+A, K61M-016:00, K61M-230:04+A
File Segment: EngPI; EPI;
DWPI Class: S05; P33; P34
Manual Codes (EPI/S-X): S05-A05A

Dialog eLink: Order File History
6/5/123 (Item 116 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0009239254 *Drawing available*
WPI Acc no: 1999-166283/199914
XRPX Acc No: N1999-121121

Pressure ventilator for small animals or human infants

Patent Assignee: MASSACHUSETTS INST TECHNOLOGY (MASI)
Inventor: KOLANDAIVELU K; POON C

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 5871008	A	19990216	US 19955035	P	19951006	199914	B
			US 1996725414	A	19961003		

Priority Applications (no., kind, date): US 19955035 P 19951006; US 1996725414 A 19961003

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 5871008	A	EN	26	29	Related to Provisional	US 19955035

Alerting Abstract US A
NOVELTY - A pressure modulator comprising a reciprocating piston assembly (302) is operated to modulate pressure within a pressure chamber (308) and to apply a negative external pressure to the patient's body, during a negative operation cycle. A pressure normalizer (304) is operated during a positive cycle of operation to normalize a base pressure corresponding to the modulated pressure in the chamber.
DESCRIPTION - A pressure chamber (308) is formed surrounding a portion of patient's thoracic cavity for isolating a portion of patient's body from the atmospheric pressure. The normalizer has a cam driver assembly to cyclically open a valve arrangement in the chamber so that the chamber is exposed to a predetermined pressure, which is biased above or below atmospheric pressure. INDEPENDENT CLAIMS are also included for the following:

A. a method of applying negative pressure to throacic cavity of body;
B. a method for applying external positive pressure to body

USE - For small animals such as new born mice or human infants. For hospitals.
ADVANTAGE - Prevents air leakage in system. Prolongs lives of newborn mice and human infants suffering from **cardiac** or respiratory diseases. Minimizes physical trauma and **mortality**. Negates **pressure** fluctuations created by valve operation. Generates **negative pressure** efficiently. Achieves wide spectrum of pressure fluctuations over large frequency range.
DESCRIPTION OF DRAWINGS - The drawing indicates an operational block diagram of a ventilator.
302 Reciprocating piston assembly
304 Pressure normalizer
308 Pressure chamber

Title Terms /Index Terms/Additional Words: PRESSURE; VENTILATION; ANIMAL;

HUMAN; INFANT

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61H-0031/02	A	I		R	20060101
A61M-0016/00	A	I		R	20060101
A61M-0016/06	A	N		R	20060101
A61H-0031/00	C	I		R	20060101
A61M-0016/00	C	I		R	20060101
A61M-0016/06	C	N		R	20060101

ECLA: A61H-031/02, A61M-016/00T
ICO: K61M-016:06A5
US Classification, Current Main: 128-202120; Secondary: 128-205260, 601-044000
US Classification, Issued: 128202.12, 60144, 128205.26
File Segment: EngPI; EPI;
DWPI Class: S05; P33
Manual Codes (EPI/S-X): S05-G02E

Dialog eLink: Order File History
6/5/124 (Item 117 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0008745456 *Drawing available*
WPI Acc no: 1998-287650/199826
XRPX Acc No: N1998-226125

Suction system using automatically controlled suction pump for heart-lung machine - uses suction unit which can be switched on and off automatically, with optical sensor to monitor blood-flow and transmit signal to control pump operation according to index of reflection

Patent Assignee: BOCK H (BOCK-I); CARDIOSMART AG (CARD-N); CARDIOSMART SA (CARD-N); KNORR A (KNOR-I)
Inventor: BOCK H; KNORR A

Patent Family (6 patents, 20 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
DE 19646410	A1	19980520	DE 19646410	A	19961111	199826	B
WO 1998021094	A1	19980522	WO 1997DE2540	A	19971103	199826	E
DE 19646410	C2	19990527	DE 19646410	A	19961111	199925	E
EP 935558	A1	19990818	EP 1997948702	A	19971103	199937	E
			WO 1997DE2540	A	19971103		
JP 2002510983	W	20020409	WO 1997DE2540	A	19971103	200227	E
			JP 1998522024	A	19971103		
US 6517512	B1	20030211	WO 1997DE2540	A	19971103	200314	E
			US 1999297959	A	19990716		

Priority Applications (no., kind, date): DE 19646410 A 19961111

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
DE 19646410	A1	DE	10	9		
WO 1998021094	A1	DE				
National Designated States,Original	JP US					
Regional Designated States,Original	AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
EP 935558	A1	DE			PCT Application	WO 1997DE2540
					Based on OPI patent	WO 1998021094
Regional Designated States,Original	CH DE FR GB IT LI					
JP 2002510983	W	JA	23		PCT Application	WO 1997DE2540
					Based on OPI patent	WO 1998021094
US 6517512	B1	EN			PCT Application	WO 1997DE2540
					Based on OPI patent	WO 1998021094

Alerting Abstract DE A1
The system comprises a suction unit (2), suction tip (8), conveyor tube (4) and suction pump (5). It has a sensor on the sensor unit (13) to monitor the blood or other fluid being sucked away. This sensor is linked by a signal conductor (10) to the pump through the sensor unit (13) which houses an optical transmitter (14) and receiver (15), with a laser

diode and a phototransistor respectively.
An electronic system within the sensor unit converts the signal of the detected flow into a control signal for the suction pump and causes the pump to switch on or off accordingly.
The optical sensor works on total reflected light so that undiminished light at the receiver switches the pump off and substantially diminished light switches it on again. The system is fully automatic.
ADVANTAGE - System for heart/lung machines with sensor operates suction pump automatically.

Title Terms /Index Terms/Additional Words: SUCTION; SYSTEM; AUTOMATIC; CONTROL; PUMP; HEART; LUNG; MACHINE; UNIT; CAN; SWITCH; OPTICAL; SENSE; MONITOR; BLOOD; FLOW; TRANSMIT; SIGNAL; OPERATE; ACCORD; INDEX; REFLECT

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-001/14			Main		"Version 7"
A61M-0001/00	A	I		R	20060101
A61M-0001/14	A	I	F	R	20060101
F04B-0049/02	A	I		R	20060101
G01F-0023/292	A	I		R	20060101
G01N-0021/43	A	I		R	20060101
A61M-0001/00	C	I		R	20060101
A61M-0001/14	C	I	F	R	20060101
F04B-0049/02	C	I		R	20060101
G01F-0023/284	C	I		R	20060101
G01N-0021/41	C	I		R	20060101

ECLA: A61M-001/00H2, F04B-049/02, G01F-023/292B2D, G01N-021/43B
ICO: K61M-001:00T
US Classification, Issued: 60467, 128DIG.003

Japan National Classification FI Terms			
FI Term	**Facet**	**Rank**	**Type**
A61M-001/00 510			
A61M-001/14 580			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C077		

File Segment: EngPI; EPI;
DWPI Class: S02; S03; S05; X25; P33; P34; Q25; Q56
Manual Codes (EPI/S-X): S02-C01B1; S03-E04B5; S05-H02; X25-L03A

Dialog eLink: Order File History
6/5/127 (Item 120 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0007987713 *Drawing available*
WPI Acc no: 1997-079189/199708
Related WPI Acc No: 2001-093722
XRPX Acc No: N1997-065738
Artificial ventilation system - has respiratory gas delivery unit with regulatory unit connectable to lung of patient and parameter monitoring unit comprising blood gas analyser
Patent Assignee: LACHMANN B (LACH-I); LACHMAN B (LACH-I)
Inventor: BOEHM S; LACHMANN B; RAJAN G

Patent Family (6 patents, 11 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
EP 753320	A1	19970115	EP 1996109790	A	19960618	199708	B
JP 9024099	A	19970128	JP 1996180979	A	19960710	199714	E
US 5752509	A	19980519	US 1996679369	A	19960710	199827	E
EP 753320	B1	20020904	EP 1996109790	A	19960618	200266	E
			EP 2000118384	A	19960618		
DE 69623400	E	20021010	DE 69623400	A	19960618	200274	E
			EP 1996109790	A	19960618		
JP 3819075	B2	20060906	JP 1996180979	A	19960710	200659	E

Priority Applications (no., kind, date): SE 19952543 A 19950710

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
EP 753320	A1	EN	29	17		
Regional Designated States,Original	CH DE ES FI GB IT LI NL SE					
JP 9024099	A	JA	25			
EP 753320	B1	EN			Related to application	EP 2000118384
					Related to patent	EP 1060755
Regional Designated States,Original	CH DE ES FI GB IT LI NL SE					
DE 69623400	E	DE			Application	EP 1996109790
					Based on OPI patent	EP 753320
JP 3819075	B2	JA	26		Previously issued patent	JP 09024099

Alerting Abstract EP A1
The system optimises the artificial ventilation of a lung system of a patient. Optimal artificial ventilation is obtained when the blood system of the patient is maximally oxygenated and, at the same time, the negative influence on the cardio pulmonary system is minimised. The ventilation system comprises a gas delivery unit (2) for delivering controllable inspiration pulses to a patient (4).
A monitoring unit (14) measures at least one parameter related to the function of the lung system, such as a blood gas analyser, and a control unit determines an optimal peak inspiratory pressure and pressure amplitude for the inspiration pulse based on the measured blood gas parameter.
ADVANTAGE - System can operate completely automatically since all relevant parameters can be measured automatically on site.

Title Terms /Index Terms/Additional Words: ARTIFICIAL; VENTILATION; SYSTEM; RESPIRATION ; GAS; DELIVER; UNIT; REGULATE; CONNECT; LUNG; PATIENT; PARAMETER; MONITOR; COMPRISE; BLOOD; ANALYSE

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-016/00			Main		"Version 7"
A61M-0016/00	A	I	F	B	20060101
A61M-0016/00	A	I		R	20060101
A61M-0016/00	C	I	F	B	20060101
A61M-0016/00	C	I		R	20060101

ECLA: A61M-016/00
ICO: K61M-230:20C, K61M-230:20D
US Classification, Current Main: 128-204230; Secondary: 128-203120, 128-203140, 128-204210
US Classification, Issued: 128204.21, 128203.12, 128203.14, 128204.23

Japan National Classification FI Terms			
FI Term	**Facet**	**Rank**	**Type**
A61M-016/00 340			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C103		

File Segment: EngPI; EPI;
DWPI Class: S05; T01; P34
Manual Codes (EPI/S-X): S05-G02E; T01-J06A; T01-J08

Dialog eLink: Order File History
6/5/128 (Item 121 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0007897767 *Drawing available*
WPI Acc no: 1996-209631/199621
XRPX Acc No: N1996-175455
Manual cardio-pulmonary resuscitation device - has first and second pressure members attached at variable distance to support beam

Patent Assignee: DATASCOPE INVESTMENT CORP (DATA-N); FORD M F (FORD-I)
Inventor: LUCAS J J; LUKAS J J; SCHOCK R B

Patent Family (16 patents, 25 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1996010984	A1	19960418	WO 1995GB2371	A	19951006	199621	B
AU 199533107	A	19960418	AU 199533107	A	19951006	199623	E
US 5630789	A	19970520	US 1994319559	A	19941007	199726	E
NO 199701591	A	19970521	WO 1995GB2371	A	19951006	199731	E
			NO 19971591	A	19970407		
MX 199504242	A1	19970101	MX 19954242	A	19951006	199816	E
EP 854698	A1	19980729	EP 1995933498	A	19951006	199834	E
			WO 1995GB2371	A	19951006		
JP 10507108	W	19980714	WO 1995GB2371	A	19951006	199838	E
			JP 1996512424	A	19951006		
TW 336170	A	19980711	TW 1995112032	A	19951114	199847	E
US 5891062	A	19990406	US 1994319559	A	19941007	199921	E
			US 1996728915	A	19961011		
AU 706324	B	19990617	AU 199533107	A	19951006	199935	E
NO 308391	B1	20000911	WO 1995GB2371	A	19951006	200052	E
			NO 19971591	A	19970407		
MX 197929	B	20000804	MX 19954242	A	19951006	200216	E
EP 854698	B1	20030502	EP 1995933498	A	19951006	200330	E
			WO 1995GB2371	A	19951006		
DE 69530615	E	20030605	DE 69530615	A	19951006	200345	E
			EP 1995933498	A	19951006		
			WO 1995GB2371	A	19951006		
ES 2199254	T3	20040216	EP 1995933498	A	19951006	200416	E
JP 3857309	B2	20061213	WO 1995GB2371	A	19951006	200701	E
			JP 1996512424	A	19951006		

Priority Applications (no., kind, date): US 1994319559 A 19941007; US 1996728915 A 19961011

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 1996010984	A1	EN	29	10		
National Designated States,Original	CN JP LV NO					
Regional Designated States,Original	AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
US 5630789	A	EN	10	10		
NO 199701591	A	NO			PCT Application	WO 1995GB2371
EP 854698	A1	EN			PCT Application	WO 1995GB2371
					Based on OPI patent	WO 1996010984
Regional Designated States,Original	AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
JP 10507108	W	JA	28		PCT Application	WO 1995GB2371
					Based on OPI patent	WO 1996010984
TW 336170	A	ZH				
US 5891062	A	EN			Continuation of application	US 1994319559
					Continuation of patent	US 5630789
AU 706324	B	EN			Previously issued patent	AU 9533107
NO 308391	B1	NO			PCT Application	WO 1995GB2371
					Previously issued patent	NO 9701591
EP 854698	B1	EN			PCT Application	WO 1995GB2371
					Based on OPI patent	WO 1996010984
Regional Designated States,Original	DE ES FR GB IT					
DE 69530615	E	DE			Application	EP 1995933498
					PCT Application	WO 1995GB2371
					Based on OPI patent	EP 854698
					Based on OPI patent	WO 1996010984
ES 2199254	T3	ES			Application	EP 1995933498
					Based on OPI patent	EP 854698
JP 3857309	B2	JA	11		PCT Application	WO 1995GB2371
					Previously issued patent	JP 10507108
					Based on OPI patent	WO 1996010984

Alerting Abstract WO A1

The device (10) includes two pressure members (18,20) mounted on a common beam (12). When placed on the victim with one member (18) on the chest and the other (20) on the abdomen, pressure on one end (34) of the beam causes compression of the thorax and decompression of the abdomen.

When pressure is applied to the other end (36) the beam, the abdomen is compressed and the thorax is decompressed.

ADVANTAGE - Facilitates alternating application of positive and **negative pressures** on **thorax** and abdomen which significantly improves **cardiac** blood flow.

Title Terms /Index Terms/Additional Words: MANUAL; CARDIO; PULMONARY; RESUSCITATION; DEVICE; FIRST; SECOND; PRESSURE; MEMBER; ATTACH; VARIABLE; DISTANCE; SUPPORT; BEAM; C.P.R.

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61H-031/00			Main		"Version 7"
A61M-016/00			Secondary		"Version 7"
A61H-0031/00	A	I	F	B	20060101
A61H-0031/00	A	I		R	20060101
A61H-0031/00	C	I	F	B	20060101
A61H-0031/00	C	I		R	20060101

ECLA: A61H-031/00
ICO: K61H-031:00A2, K61H-031:00A3
US Classification, Current Main: 601-041000; Secondary: 601-001000, 601-135000
US Classification, Issued: 6011, 601135, 60141, 6011, 601135, 60141

Japan National Classification FI Terms

FI Term	Facet	Rank	Type
A61H-031/00			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C074		
4C074	AA04	
4C074	BB04	
4C074	CC18	
4C074	DD06	
4C074	FF01	
4C074	FF05	
4C074	GG01	

File Segment: EngPI; ;
DWPI Class: P31; P33; P34

Dialog eLink: Order File History
6/5/132 (Item 125 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0006987655 *Drawing available*
WPI Acc no: 1994-343067/199443
Related WPI Acc No: 1992-351402
XRPX Acc No: N1994-269211
Cardiopulmonary resuscitation device - has vacuum cup with connecting stem attached with handle having pair of spaced-apart gripping surfaces
Patent Assignee: AMBU INT AS (AMBU-N); UNIV CALIFORNIA (REGC)
Inventor: COHEN T J; KOHNKE O B; LURIE K G

Patent Family (11 patents, 21 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
EP 623334	A1	19941109	EP 1994106492	A	19940426	199443	B
AU 199460539	A	19941110	AU 199460539	A	19940418	199445	E
CA 2117275	A	19941105	CA 2117275	A	19940414	199505	E
BR 199401638	A	19941220	BR 19941638	A	19940428	199507	E
US 5645522	A	19970708	US 1991686542	A	19910417	199733	E
			US 199358195	A	19930504		
AU 687379	B	19980226	AU 199460539	A	19940418	199821	E
EP 623334	B1	19990609	EP 1994106492	A	19940426	199927	E
DE 69418937	E	19990715	DE 69418937	A	19940426	199934	E
			EP 1994106492	A	19940426		
ES 2132274	T3	19990816	EP 1994106492	A	19940426	199939	E
JP 3072318	B2	20000731	JP 199494478	A	19940506	200041	E
CA 2117275	C	20011216	CA 2117275	A	19940414	200163	E

Priority Applications (no., kind, date): US 1991686542 A 19910417; US 199358195 A 19930504

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
EP 623334	A1	EN	19	15		
Regional Designated States,Original	AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
CA 2117275	A	EN				
BR 199401638	A	PT				
US 5645522	A	EN	17	16	C-I-P of application	US 1991686542
AU 687379	B	EN			Previously issued patent	AU 9460539
EP 623334	B1	EN				
Regional Designated States,Original	AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
DE 69418937	E	DE			Application	EP 1994106492
					Based on OPI patent	EP 623334
ES 2132274	T3	ES			Application	EP 1994106492
					Based on OPI patent	EP 623334
JP 3072318	B2	JA	14		Previously issued patent	JP 06343701
CA 2117275	C	EN				

Alerting Abstract EP A1
A vacuum cup is provided having an upper surface and lower lip which is disposed in horizontal contact plane. A connecting stem has upper and lower ends, where the lower is attached to the upper surface of the vacuum cup and extends vertically upward relative to the contact plane.
A handle is attached to upper end of the connecting stem and include a pair of parallel, transversely spaced-apart gripping surfaces, located in a plane parallel to the contact. The vacuum cup is composed of elastomeric material, and includes an upper chamber and reinforcement ring circumscribing the vacuum cup.
ADVANTAGE - Provides an alternatively compressing and expanding of patient's chest to induce both ventilation and blood circulation.

Title Terms /Index Terms/Additional Words: RESUSCITATION; DEVICE; VACUUM; CUP; CONNECT; STEM; ATTACH; HANDLE; PAIR; SPACE; APART; GRIP; SURFACE

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61H-031/00			Main		"Version 7"
A61H-0031/00	A	I		R	20060101
A61H-0031/00	C	I		R	20060101

ECLA: A61H-031/00
ICO: K61H-031:00A2, K61H-031:00A3, K61H-230:04
US Classification, Issued: 60143, 607142

Japan National Classification FI Terms			
FI Term	**Facet**	**Rank**	**Type**
A61H-031/00			

Japan National Classification F Terms		
Theme	**ViewPoint + Figure**	**Additional Code**
4C074		
4C074	AA10	
4C074	BB04	
4C074	CC20	
4C074	DD06	
4C074	FF01	
4C074	GG01	

File Segment: EngPI; ;
DWPI Class: P31; P33

Dialog eLink: Order File History
6/5/133 (Item 126 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0006795458 *Drawing available*
WPI Acc no: 1994-181755/199422
XRPX Acc No: N1994-143523

Seismic cardiograph appts for studying mechanical activities of the heart - has series connected vacuum electrode, amplifier, delay unit and mechanical vibrator attached to seismic cardio-sensor so as to let mechanical action direction coincide with direction of roll of sensor pendulum

Patent Assignee: KAZA CARDIOLOGY RES INST (KCAR-R)
Inventor: LIPSKII E A

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
SU 1804784	A1	19930330	SU 4662734	A	19890314	199422	B

Priority Applications (no., kind, date): SU 4662734 A 19890314

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
SU 1804784	A1	RU	3	2	

Alerting Abstract SU A1
Appts consists of a seismo-**cardiographic** sensor (1) with the mechanical vibrations generator (2)attached to it and placed on a patient`s **chest** with the help of the **vacuum** electrode (3). The sensor (1) is connected to a matching amplifier (5) via the leads (4). The amplifier (5) feeds signals to a recording instrument (6). The vacuum electrode (3) is connected to the amplifier - shaper (8) whose output is taken to the univibrator (9) circuit. The univibrator (9) controls the transistor (10) switched in the relay (11) winding circuit. The supply (12) is connected to the mechanical vibrations generator (2) via normally-open contacts of the relay (11) and the conductors (13).
The patients chest vibrations related to heart beat are transferred to the sensor (1) where they are converted into electric signals fed to matching amplifier (5) and the recorder.
USE/ADVANTAGE - For studying real dynamics of cardiac activities, forming the basis for determining its parameters. Its effectiveness is increased by vacuum electrode. Bul. 12/30.3.93

Title Terms /Index Terms/Additional Words: SEISMIC; CARDIOGRAM; APPARATUS; STUDY; MECHANICAL; ACTIVE; HEART; SERIES; CONNECT; VACUUM; ELECTRODE; AMPLIFY; DELAY; UNIT; VIBRATION; ATTACH; CARDIO; SENSE; SO; ACTION; DIRECTION; COINCIDE; ROLL; PENDULUM

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61B-0005/02	A	I		R	20060101
A61B-0005/02	C	I		R	20060101

File Segment: EngPI; EPI;
DWPI Class: S05; P31
Manual Codes (EPI/S-X): S05-D01B1

Dialog eLink: Order File History
6/5/134 (Item 127 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0006206941 *Drawing available*
WPI Acc no: 1992-351402/199243
Related WPI Acc No: 1994-343067
XRPX Acc No: N1992-267925
External chest compression for resuscitation - using body with stiff upper surface which withstand force, lower soft surface which spreads on application of force and handle
Patent Assignee: UNIV CALIFORNIA (REGC)
Inventor: COHEN T J; LURIE K G

Patent Family (9 patents, 18 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 509773	A1	19921021	EP 1992303367	A	19920415	199243	B
AU 199214877	A	19921022	AU 199214877	A	19920413	199250	E
CA 2066297	A	19921018	CA 2066297	A	19920416	199302	E
AU 651189	B	19940714	AU 199214877	A	19920413	199432	E
US 5454779	A	19951003	US 1991686542	A	19910417	199545	E
			US 1994226431	A	19940412		
EP 509773	B1	19980107	EP 1992303367	A	19920415	199806	E
DE 69223840	E	19980212	DE 69223840	A	19920415	199812	E
			EP 1992303367	A	19920415		
ES 2112298	T3	19980401	EP 1992303367	A	19920415	199819	E
CA 2066297	C	20000905	CA 2066297	A	19920416	200053	E

Priority Applications (no., kind, date): US 1991686542 A 19910417; US 1994226431 A 19940412

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
EP 509773	A1	EN	13	9		
Regional Designated States,Original	AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE					
CA 2066297	A	EN				
AU 651189	B	EN			Previously issued patent	AU 9214877
US 5454779	A	EN	13	9	Continuation of application	US 1991686542
EP 509773	B1	EN	12	7		
Regional Designated States,Original	DE ES FR GB IT					
DE 69223840	E	DE			Application	EP 1992303367
					Based on OPI patent	EP 509773
ES 2112298	T3	ES			Application	EP 1992303367
					Based on OPI patent	EP 509773
CA 2066297	C	EN				

Alerting Abstract EP A1
The device has a vacuum cup body (12) with a concave interior (14) and a flat upper surface (18). A step (20) on the upper surface secures a performer's hand or a drive member to the applicator. The body tapers down from a thick top to a skirt (22) which terminates at the periphery in a lip (16).
As the user presses against the upper surface, the lip (16) and skirt (22) will spread out to create a vacuum in the cup. Lifting the hands causes the chest to be expanded upwardly.
USE/ADVANTAGE - Cardiopulmonary resuscitation device. Actively expands halienty chest to improve respiration and blood flow.

Title Terms /Index Terms/Additional Words: EXTERNAL; CHEST; COMPRESS; RESUSCITATION; BODY; STIFF; UPPER; SURFACE; WITHSTAND; FORCE; LOWER; SOFT; SPREAD; APPLY; HANDLE

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61H-031/00			Main		"Version 7"
A61H-0031/00	A	I		R	20060101
A61H-0031/00	C	I		R	20060101

ECLA: A61H-031/00
ICO: K61H-031:00A2, K61H-031:00A3, K61H-230:04
US Classification, Issued: 60143, 607142
File Segment: EngPI; ;
DWPI Class: P33; P34

Dialog eLink: Order File History
6/5/136 (Item 129 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0006139193 *Drawing available*
WPI Acc no: 1992-381190/199246
XRPX Acc No: N1992-290757
Method for preventing aspiration of air in cardio- pulmonary by-pass patients - involves coupling non-occlusive blood bump in line with heart-lung machine
Patent Assignee: KOLFF J (KOLF-I)
Inventor: KOLFF J; WURZEL D

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 5158539	A	19921027	US 1990474482	A	19900202	199246	B

Priority Applications (no., kind, date): US 1990474482 A 19900202

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
US 5158539	A	EN	6	4	

Alerting Abstract US A
The method for preventing aspiration of ambient air through sutures formed in the circulatory system of a patient during perfusion of blood through a heart-lung bypass

device, comprises positioning the patient in an elevated location with respect to the heart-lung device and coupling a nonocclusive blood pump in fluid line with the heart-lung device. It involves coupling an extracorporeal arterial blood line in fluid communication between the pump and the patient's circulatory system such that the extracorporeal arterial blood line provides containment for a column of blood which is subject to gravity forces generating a positive pressure head with respect to blood flowing.
A unidirectional valve within the extracorporeal arterial blood line offers nominal resistance against blood being returned against gravity to the patient, but blocks reverse blood flow from the patient to the heart-lung device when the positive pressure of the column of blood overcomes pumping forces of the pump.

Title Terms /Index Terms/Additional Words: METHOD; PREVENT; ASPIRATE; AIR; CARDIO; PULMONARY; BY-PASS; PATIENT; COUPLE; NON; OCCLUDE; BLOOD; BUMP; LINE; HEART ; LUNG; MACHINE

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0001/10	A	N		R	20060101
A61M-0001/16	A	N		R	20060101
A61M-0001/36	A	I		R	20060101
A61M-0039/24	A	N		R	20060101
A61M-0001/10	C	N		R	20060101
A61M-0001/16	C	N		R	20060101
A61M-0001/36	C	I		R	20060101
A61M-0039/00	C	N		R	20060101

ECLA: A61M-001/36C99
ICO: K61M-001:10C, K61M-001:10C1D, K61M-001:16S, K61M-001:36C10A, K61M-001:36C4, K61M-039:24
US Classification, Current Main: 604-031000; Secondary: 128-DIG003, 137-855000, 251-342000, 604-247000
US Classification, Issued: 60431, 128DIG.003, 137855, 251342, 604247
File Segment: EngPI; ;
DWPI Class: P34

DIALOG(R)File 350: Derwent WPIX
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0005846223 *Drawing available*
WPI Acc no: 1992-072073/199209
XRPX Acc No: N1992-054172

Auto-transfusion apparatus - has vacuum regulation and cardiotomy reservoir with water seal

Patent Assignee: GISH BIOMEDICAL INC (GISH-N)
Inventor: BROWN J W; LICHTE L J

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 5087250	A	19920211	US 1988224307	A	19880726	199209	B
			US 1990481861	A	19900216		

Priority Applications (no., kind, date): US 1988224307 A 19880726; US 1990481861 A 19900216

Alerting Abstract US A
The pleural drainage/auto-transfusion appts. is in combination with a **cardiotomy** reservoir having a **vacuum** regulating chamber in connected relationship to the **pleural** drainage/autotransfusion appts. The **vacuum** regulating chamber is formed of a portion of the **cardiotomy** reservoir and extends along the axial direction of the reservoir of the autotransfusion appts. and can be connected to a source of vacuum.
A water seal is interposed between the vacuum regulating chamber and the interior of the reservoir in order to provide for water sealed negative pressure within the reservoir. The function of the cardiotomy reservoir and the pleural drainage/autotransfusion unit can be changed by means of connections that have spring loaded tangs that engage a flange of a barbed inlet port.
ADVANTAGE - Does not require a separate manometer. @(13pp Dwg.No.1/10)@

Title Terms /Index Terms/Additional Words: AUTO; TRANSFUSION; APPARATUS; VACUUM; REGULATE; CARDIOTOMY; RESERVOIR; WATER; SEAL

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-001/00			Secondary		"Version 7"

ECLA: A61M-001/00A6, A61M-001/36C4
US Classification, Current Main: 604-321000; Secondary: 604-319000
US Classification, Issued: 604321, 6044, 604319
File Segment: EngPI; ;

DWPI Class: P34

Dialog eLink: Order File History
6/5/142 (Item 135 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0005407254 *Drawing available*
WPI Acc no: 1991-005085/199101
XRPX Acc No: N1991-003848
Extracorporeal blood circulation roller pump - with 1.10-1.12 ratio between occluded parts of venous and arterial pumps
Patent Assignee: PULMONOLOGY RES INS (PULM-R)
Inventor: TSVETKOV S P; VOINOV V A; ZELIKSON B M

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
SU 1560225	A	19900430				199101	B

Alerting Abstract SU A
In the extracorporeal blood circulation roller pump, the ratio between the lengths of the occluded parts of the venous (3) and arterial (5) pipes respectively is equal to 1.10-1.12. ADVANTAGE - This construction of the extracorporeal **blood circulation** roller pump increases the speed of **aspiration** of venous blood in cases of acute **respiratory** failure by automatic maintenance of the differential between impact volumes in the venous and arterial pipes. Bul.16/30.4.90 @(2pp Dwg. No.2/2)@

Title Terms /Index Terms/Additional Words: EXTRACORPOREAL; BLOOD; CIRCULATE; ROLL; PUMP ; RATIO; OCCLUDE; PART; VEIN; ARTERY

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0001/10	A	I		R	20060101
A61M-0001/10	C	I		R	20060101

File Segment: EngPI; ;
DWPI Class: P34

Dialog eLink: Order File History
6/5/143 (Item 136 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0005200250
WPI Acc no: 1990-191702/199025
XRPX Acc No: N1990-149072
Cardio-surgery artificial blood circulation air embolus prophylaxis - by forced perfusion of pulmonary artery through cannula in right ventricle
Patent Assignee: POLYAKOV V P (POLY-I)
Inventor: GORYACHEV V V; POLYAKOV V P; SEMAGIN A P

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
SU 1507339	A	19890915	SU 4184438	A	19870119	199025	B

Priority Applications (no., kind, date): SU 4184438 A 19870119
Alerting Abstract SU A
According to the proposed method, **air** is completely **removed** from the **pulmonary** veins and the left part of the **heart**. Forced perfusion of the pulmonary artery is made, with a circulation volume of 30% of the circulation volume in the aorta. An outlet of the arterial trunk of artificial-circulation appts. i.e. a cannula, is inserted into the pulmonary artery through a puncture in the right ventricle.
ADVANTAGE - Reduces post-operative embolic complications with open- **heart** surgery by complete **removal** of **air** from the **pulmonary** vein and left section of the **heart**. Bul.34/15.9.89

Title Terms /Index Terms/Additional Words: CARDIO; SURGICAL; ARTIFICIAL; BLOOD; CIRCULATE; AIR; EMBOLISM; PROPHYLACTIC; FORCE; PERFUSION; PULMONARY; ARTERY ; THROUGH; CANNULA; RIGHT; VENTRICLE

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61B-0017/00	A	I		R	20060101
A61M-0001/10	A	I		R	20060101
A61B-0017/00	C	I		R	20060101
A61M-0001/10	C	I		R	20060101

File Segment: EngPI; ;
DWPI Class: P31; P34

Dialog eLink: Order File History
6/5/147 (Item 140 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0003067418
WPI Acc no: 1984-158638/198425
Respiratory gas supply system - incorporates negative pressure sensing of inspiration to initiate pulsed gas supply, so preventing over-oxygenation and apnoea effects
Patent Assignee: KIRCALDIE RANDALL (KIRC-N); MCGRATH J F (MCGR-I); PULSAIR ANSTALT (PULS-N); TRITEC INDS INC (TRIT-N)
Inventor: CHEN C S K; CHEN K C S; DURKAN D G; DURKAN G; DURKAN G D; SIERACKI L M; SIERACKI M L

Patent Family (14 patents, 14 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 1984002080	A	19840607	WO 1983US1890	A	19831202	198425	B
US 4461293	A	19840724	US 1982446543	A	19821203	198432	E
			US 1982446810	A	19821203		
US 4462398	A	19840731	US 1982446542	A	19821203	198433	E
			US 1982446543	A	19821203		
			US 1982446810	A	19821203		
AU 198423324	A	19840618				198439	E
EP 127675	A	19841212	EP 1983900225	A	19831202	198450	E
US 4506666	A	19850326	US 1982446543	A	19821203	198515	E
			US 1982446810	A	19821203		
JP 60500403	W	19850328	JP 1983500209	A	19831202	198519	E
US 4519387	A	19850528	US 1982446543	A	19821203	198524	E
			US 1982446810	A	19821203		
			US 1984623594	A	19840622		
US 4570631	A	19860218	US 1982446543	A	19821203	198610	E
			US 1982446810	A	19821203		
			US 1985715312	A	19850325		
CA 1231416	A	19880112				198806	E
AU 198816450	A	19880811				198839	E
CA 1261943	A	19890926				198945	E
EP 127675	B1	19920826	WO 1983US1890	A	19831202	199235	E
			EP 1984900225	A	19831202		
DE 3382613	G	19921001	DE 3382613	A	19831202	199241	E
			WO 1983US1890	A	19831202		
			EP 1984900225	A	19831202		

Priority Applications (no., kind, date): US 1982446542 A 19821203; US 1982446543 A 19821203; US 1982446810 A 19821203; US 1984623594 A 19840622; US 1985715312 A 19850325

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
WO 1984002080	A	EN	57	8		
National Designated States,Original	AU BR JP					
Regional Designated States,Original	AT BE CH DE FR GB LU NL SE					
EP 127675	A	EN		8		
Regional Designated States,Original	AT BE CH DE FR GB LI LU NL SE					
CA 1231416	A	EN				
CA 1261943	A	EN				
EP 127675	B1	EN	25	8	PCT Application	WO 1983US1890
					Based on OPI patent	WO 1984002080
Regional Designated States,Original	AT BE CH DE FR GB LI LU NL SE					
DE 3382613	G	DE			PCT Application	WO 1983US1890
					Application	EP 1984900225
					Based on OPI patent	EP 127675
					Based on OPI patent	WO 1984002080

Alerting Abstract WO A
A control circuit (32) responding to the sensor system (28c) controls the spool valve (26) in the line from the gas source (20) to the cannula (48) which forms the device for applying the gas to the in vivo respiratory system. Also included in the line are a flowmeter (22) and a fluidic capacitance (24).
The sensing system (28c) includes a fluidic pressure sensor, generating a proportional electric signal, together with a biased turbulent proportional amplifier (30). One output of this amplifier controls the pressure-to-electric switch (31) of the circuit (32) controlling the spool valve (26) which is responsible for supplying spiked or square pulses of gas to the single hose cannula (48). Pulses of gas are only applied if the negative pressure sensed does not occur within a preselected delay interval.

Title Terms /Index Terms/Additional Words: RESPIRATION; GAS; SUPPLY; SYSTEM; INCORPORATE; NEGATIVE; PRESSURE; SENSE; INSPIRATION; INITIATE; PULSE; SO; PREVENT; OXYGENATE; APNOEA; EFFECT

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-015/00			Main		"Version 7"
A61M-0015/00	A	I		R	20060101
A61M-0016/00	A	I		R	20060101
A61M-0016/06	A	N		R	20060101
A61N-0001/36	A	I		R	20060101
A61M-0015/00	C	I		R	20060101
A61M-0016/00	C	I		R	20060101
A61M-0016/06	C	N		R	20060101
A61N-0001/36	C	I		R	20060101

ECLA: A61M-016/00, A61N-001/36C
ICO: K61M-016:00A12, K61M-016:00A8B2, K61M-016:00A8B4, K61M-016:06L1A2, K61M-205:05E, K61M-230:60
US Classification, Current Main: 128-200140, 128-204230; Secondary: 128-203120, 128-204230, 128-204240 , 128-204260, 128-207180, 607-042000
US Classification, Issued: 128204.23, 128204.24, 128200.14, 128203.12, 128204.23, 128204.24, 128204.26 , 128207.18, 128204.23, 128204.24, 128419.G, 128204.23, 128204.26, 128204.23, 128204.24, 128419.G
File Segment: EngPI; EPI;
DWPI Class: S05; P34
Manual Codes (EPI/S-X): S05-X

Dialog eLink: Order File History
6/5/149 (Item 142 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0000692690
WPI Acc no: 1974-A9929V/197414
Surgical blood pump for draining wounds - used with a heart- lung machine and sensitive to suction conditions to minimise air entrainments
Patent Assignee: E G WEISHAAR (WEIS-I)

Patent Family (2 patents, 2 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 3799702	A	19740326	US 1972306937	A	19721115	197414	B
FR 2196817	A	19740322				197421	E

Priority Applications (no., kind, date): US 1972306937 A 19721115
Title Terms /Index Terms/Additional Words: SURGICAL; BLOOD; PUMP; DRAIN; WOUND; HEART; LUNG; MACHINE; SENSITIVE; SUCTION; CONDITION; MINIMISE; AIR; ENTRAIN

Class Codes

International Patent Classification					
IPC	**Class Level**	**Scope**	**Position**	**Status**	**Version Date**
A61M-0001/00	A	I		R	20060101
F04B-0043/12	A	I		R	20060101
F04B-0049/02	A	I		R	20060101
F04B-0049/08	A	I		R	20060101
A61M-0001/00	C	I		R	20060101
F04B-0043/12	C	I		R	20060101
F04B-0049/02	C	I		R	20060101
F04B-0049/08	C	I		R	20060101

ECLA: A61M-001/00H2, F04B-043/12G10, F04B-049/02C, F04B-049/08
ICO: K61M-001:00H4
US Classification, Current Main: 417-038000; Secondary: 417-477100, 604-118000, 604-153000
File Segment: EngPI; ;
DWPI Class: P34; Q56